



Administrative County of Middlesex.

ANNUAL REPORT

OF THE

COUNTY MEDICAL OFFICER OF HEALTH

FOR THE

YEAR 1946.

LONDON.

GARRISON AND SONS, LTD., ST. MARTIN'S LANE, W.C.2.

Printed by The Major, The King.



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PREFACE.TO THE CHAIRMAN, ALDERMEN AND MEMBERS OF THE
COUNTY COUNCIL OF MIDDLESEX.

SIR, LADIES AND GENTLEMEN,

The year under review has been noteworthy for the placing on the Statute Book of probably the most revolutionary measure of Health legislation ever drafted, namely the National Health Service Act. Even so it is not comprehensive, for the increasingly important and complex sphere of industrial medicine remains wholly outside its scope. Apart from this, however, the Act does deal with most branches of preventive and curative medicine, and in particular ensures that the range of their availability shall no longer be restricted by financial considerations.

It is perhaps inevitable that an enactment involving such sweeping reforms should not be able to secure in face of the conflicting interests involved, the full measure of co-ordination between the different branches of the Health service which would be desirable. Consequently its implementation is likely to give rise to many administrative difficulties which can only be overcome by the exercise of toleration and goodwill on all sides.

The medical services with which the Act deals will be distributed between three types of administrative bodies. Two of these are new, the Executive Councils and the Regional Hospital Boards, while the existing County Council and County Borough Councils form the third.

The Executive Councils are entrusted with the general practitioner services both medical and dental and general practitioners undertaking work under the National Health Service Act will be in contractual relationship with them. In general their functions will correspond to those of existing Insurance Committees, though considerably expanded. The areas under the control of individual Executive Councils will be co-terminous with those of existing Counties and County Boroughs, a fact which should prove of value in co-ordination of the services provided by each authority.

Hospital and specialist services become the responsibility of the Regional Hospital Boards. The whole of the country has been divided into fourteen hospital regions each based upon a university with a medical faculty and each containing a population of the order of two to four million. Hospital regions, unlike Executive Council areas, are not co-terminous with Counties and County Boroughs or groups of them. Thus the hospital service which the Middlesex County Council has been developing with such signal success since 1930, will now be divided and its hospitals will be apportioned between two authorities, the North-West and North-East Metropolitan Regional Hospital Boards respectively, each of which will also be responsible for local authority hospitals in adjacent parts of London and the home counties, together with the voluntary hospitals throughout its region.

While in this manner it will lose its hospitals, the County Council as Local Health Authority under the Act, will become responsible for the administration of the personal health services throughout the whole of Middlesex, including those which hitherto have been administered independently by seventeen out of the twenty-six Borough and District Councils in the County. A transfer of functions on this scale will doubtless create problems calling for great circumspection in their handling, and it seems probable that the measure of direct responsibility falling upon the County Council in connection with the health of the people of Middlesex, will be little, if at all, diminished by the loss of its hospitals. Among personal health services are included the care of mothers and young children, domiciliary midwifery, home nursing, health visiting, domestic help, ambulance services, vaccination and immunisation, the care and after-care of persons suffering from illness, either physical or mental, and the provision and maintenance of health centres. The Act gives Local Health Authorities powers of the widest description in connection with the development of these services, and since they constitute in many respects a vital link between the general practitioner services on the one hand and the hospital and specialist services on the other, the importance of the part which the County Council can play in the evolution of the national health service in Middlesex, is obvious.

Environmental health services such as housing, prevention of nuisance, drainage, disinfection and other measures for the control of infectious disease, and supervision to ensure a pure water and wholesome food supply remain within the province of the Borough and District Councils.

Thus altogether four separate authorities will be concerned with the day to day administration of matters affecting the health of the general population in any given area. Moreover in a number of instances the line of demarcation between the responsibility of one authority and another is ill-defined. For example from the start tuberculosis officers will be jointly employed by Local Health Authorities and Regional Hospital Boards. Thus many difficult problems of co-ordination will arise and accordingly if the splendid potentialities of the Act are to be fully realised, it is essential that it be administered by all parties concerned with wisdom, foresight and the greatest flexibility.

During the year under review there has been a notable influx of population into the County. The slight fall which occurred during the war years has been completely reversed and the population is now considerably above the highest previously recorded figure, that for mid-1939. This has

naturally involved a severe strain on available housing accommodation and there is no doubt there have been some instances of overcrowding. Fortunately, however, the vigorous measures for the provision of additional housing accommodation undertaken by the various local authorities in Middlesex, have done much to keep serious overcrowding within minimal limits.

In spite of the strain upon the health services occasioned by the rising population and the difficult housing situation, the health of the County has continued good. Once again the death rate for tuberculosis (all forms) and the infant mortality rate constitute new low records and in both instances are markedly below the corresponding figures for England and Wales as a whole. The year has been free from any serious outbreak of infectious disease. The death-rate for diphtheria is the lowest ever recorded in Middlesex and bears eloquent testimony to the value of the campaign for immunisation against the disease, which has continued to be waged with vigour.

The preparation of this report has been seriously delayed by the enormous pressure falling upon the Public Health department in connection with the necessary preparations for the implementation of the National Health Service Act. In consequence although the whole of the work recorded was carried out under the direction of my predecessor, Dr. H. M. C. Macaulay, the report does not appear over his signature. I could not let this occasion pass without paying sincere tribute to his wise and inspiring leadership of the Department throughout his tenure of the office of County Medical Officer of Health. The result has been that in spite of the disturbance arising out of the transfer of the County Council's hospitals to Regional Hospital Boards and the consequential loss of a number of valuable members of the central office staff, he has left behind an efficient and smoothly running machine, which has proved well able to cope with the many difficult new problems facing it.

Nevertheless the changing conditions have made severe demands upon the time and energy of all members of the staff and I acknowledge with gratitude the unfailing spirit of co-operation and cheerfulness with which these demands have been met. Particularly I would mention my indebtedness to the indispensable help of my Chief Lay Administrative Officer, Mr. W. J. Mihill.

I have the honour to be,

Your obedient servant,

A. C. T. PERKINS,
County Medical Officer.

PUBLIC HEALTH DEPARTMENT,
10, GREAT GEORGE STREET,
WESTMINSTER, S.W.1.

June, 1948.

STAFF.

County Medical Officer of Health and School Medical Officer :

H. M. C. Macaulay, M.D., B.S., B.Sc., D.P.H.

Deputy County Medical Officer of Health and Deputy School Medical Officer :

A. C. T. Perkins, M.C., M.D., B.S., D.P.H.

Principal Assistant Medical Officers :

Miss M. Back, M.D., B.S., D.P.H.

J. B. Ewen, M.D., Ch.B., D.P.H.

J. O. F. Davies, M.D., B.S., D.P.H., D.R.C.O.G.

T. O. Garland, M.A., M.D., B.Ch., D.P.H. (Resigned Dec., 1946).

Tuberculosis Medical Officers :

Beatrice A. Butterworth, M.B., M.R.C.P. (Appointed Sept., 1946).

N. Macdonald, M.B., Ch.B., M.R.C.P.

J. T. N. Roe, M.D., Ch.B., D.P.H.

O. Bruce, M.R.C.S., L.R.C.P. (Resigned May, 1946).

B. C. Thompson, M.A., M.D., B.Ch. (Resigned June, 1946).

S. Trevor Davies, M.R.C.S., L.R.C.P. (Retired Feb., 1946).

M. Tate, M.D., M.R.C.S., L.R.C.P., D.C.H. (Acting).

V. Feldman, M.D., M.R.C.P., D.P.H.

C. H. C. Toussaint, M.R.C.S., L.R.C.P., D.P.H. (Appointed Aug., 1946).

A. S. Hall, M.A., M.B., M.R.C.P. (Resigned Oct., 1946).

H. J. Trenchard, M.B., Ch.B., M.R.C.P. (Appointed Oct., 1946).

R. Heller, M.D.

Assistant Tuberculosis Officers :

F. C. N. Holden, M.B., B.S.

P. Stradling, M.B., B.S., M.R.C.S., M.R.C.P. (Appointed Nov., 1946).

H. W. Rees, M.R.C.S., L.R.C.P.

C. J. Stewart, M.D., M.R.C.S., L.R.C.P., D.R.C.O.G. (Appointed Oct., 1946).

Physician in Charge Mass X-Ray Unit.

W. Pointon Dick, M.R.C.S., L.R.C.P.

Assistant Medical Officers :

(Maternity and Child Welfare and School Medical Services.)

Miss J. R. Campbell, M.B., Ch.B., D.P.H.

Miss M. M. O'Connor, M.R.C.S., L.R.C.P., D.P.H. (Transferred from Southall, April, 1946).

Miss M. L. Campbell, M.B., B.Ch., B.A.O., D.P.H.

Mrs. D. L. Carter, M.B., B.S.

Mrs. M. M. Osborn, M.R.C.S., L.R.C.P.

Miss K. Glyn-Jones, M.R.C.S., L.R.C.P.

Mrs. E. G. Porter, M.R.C.S., L.R.C.P., D.P.H.

Miss M. M. Goudie, M.B., Ch.B.

† Miss M. K. Ruddy, M.D., B.S., B.Sc.

‡§ Miss P. G. Holman, M.R.C.P., D.P.M.

‡ Miss M. V. Saul, M.B., B.S., D.P.M.

R. A. Jones, M.B., Ch.B., B.Sc., D.P.H.

§ Mrs. E. Shannon, M.B., Ch.B.

Miss E. M. Malmberg, M.B., B.S., D.P.H.

Mrs. R. H. Shelley, M.B., B.S. (Retired April, 1946).

Mrs. L. A. Matheson, M.B., Ch.B.

Miss E. S. Stephen, M.B., Ch.B., D.P.H.

H. W. Moir, M.B., Ch.B., D.P.H.

Miss C. I. Wright, M.D., B.S., D.P.H.

† Psychiatrist, Middlesex Education Committee.

‡ Asst. Psychiatrist, Middlesex Education Committee.

§ Part-time.

Chief Dental Officer :

J. F. Pilbeam, L.D.S.

Dental Officers :

A. S. Carr, L.D.S. (Reinstated Jan., 1946).	F. J. Lord, L.D.S. (Reinstated and transferred to Harrow, Mar., 1946).
S. E. Charman, L.D.S. (Reinstated Mar., 1946).	S. A. McLaren, L.D.S. (Reinstated May, 1946).
R. E. Cook, L.D.S. (Reinstated Feb., 1946).	Miss M. A. Macdonald, L.D.S.
G. M. Davie, L.D.S.	L. C. Mandeville, L.D.S.
N. K. Davison, L.D.S. (Appointed Dec., 1946).	R. S. Matthew, L.D.S. (Reinstated and transferred to Wembley, Jan., 1946).
Mrs. A. M. Ferry, L.D.S.	R. Nuki, M.D. (Terminated Mar., 1946).
W. G. C. Hackman, L.D.S.	E. Plessner, M.D. (Resigned Sept., 1946).
Miss I. Halsall, L.D.S.	Mrs. T. Schroetter, M.D.
D. D. Hamilton, L.D.S. (Terminated May, 1946).	†Miss G. M. Seal, L.D.S.
Mrs. E. M. Jones, L.D.S. (Terminated May, 1946).	
F. Jones, L.D.S. (Reinstated May, 1946).	
W. A. Lilley, B.D.S., L.D.S. (Resigned Sept., 1946).	

Orthodontist :

†Miss K. C. Smyth, L.D.S.

Assistant Orthodontists :

†Mrs. C. M. Figgis, L.D.S.	†Mrs. M. C. Strange, L.D.S.
†Mrs. E. M. Johnson, L.D.S. (Appointed Jan., 1946).	

Non-medical Supervisor of Midwives :

Miss L. B. Young, S.R.N., S.C.M.

Assistant Supervisor of Day Nurseries :

Miss J. M. Akester, S.R.N., S.C.M., D.N.

Special Services Almoners :

Miss D. Myer.	Mrs. F. C. Carling (Resigned Oct., 1946).
<i>Tuberculosis Visitors</i>	31
<i>Tuberculosis Welfare Officers and Assistant Welfare Officers</i>	12
<i>Health Visitors and School Nurses</i>	49
<i>Dental Attendants</i>	20
<i>Midwives</i>	34

*Ophthalmic Surgeons (part time) :**(Maternity and Child Welfare, School Medical Service, Certification of Blind Persons)*

Miss A. L. Adam, M.B., B.S., D.O.M.S. (Resigned Feb., 1946).	J. Joels, M.B., Ch.B., D.O.M.S.
Miss Jean M. Dollar, M.S., F.R.C.S., D.O.M.S.	F. J. Lorriman, M.D., F.R.C.S., D.O.M.S. (Appointed Feb., 1946).
R. E. Henry, M.B., Ch.M., D.O.M.S.	C. Yow, M.D., Ch.B.
Miss E. Howes, M.R.C.S., L.R.C.P.	

HOSPITALS.*

NORTH MIDDLESEX COUNTY HOSPITAL.

Medical Director :

Ivor Lewis, M.D., M.S., D.P.H.

Physicians :

R. Kempthorne, M.A., B.M., B.Ch., M.R.C.P.
 V. L. Collins, M.D., M.R.C.P., D.C.H. (Resigned
 Sept., 1946).

Surgeons :

H. O. Blauvelt, M.D., C.M., F.R.C.S. (Transferred
 to Chase Farm Hospital, July, 1946).
 H. W. Hall, M.B., B.S., F.R.C.S.

Obstetric Surgeons :

‡K. A. Hudson, M.B., Ch.M., M.R.C.O.G.
 A. W. Purdie, M.B., Ch.B., F.R.F.P. & S.,
 M.R.C.O.G.
 D. Friedlander, M.B., Ch.B., M.R.C.O.G.

Pathologists :

T. H. C. Benians, F.R.C.S. (part-time).
 J. F. Heggie, V.D., B.Sc., M.B., Ch.B. (Appointed
 Oct., 1946).

Anæsthetists :

Miss N. I. Faux, M.B., B.S., D.A., D.P.H.
 1 vacancy.

Chief Assistants :

6 vacancies.

Assistant Medical Officers : 7.*House Officers :* 7.*Matron :*

Miss D. G. Rootham.

REDHILL COUNTY HOSPITAL.

Medical Director :

J. N. Deacon, M.C., M.B., B.S.

Physicians :

G. H. Jennings, M.A., M.D., M.R.C.P.
 L. I. M. Castleden, M.D., M.R.C.P.

Surgeons :

D. B. Craig, F.R.C.S., D.L.O.
 F. Forty, M.B., B.S., F.R.C.S.
 R. Trevor Jones, B.Sc., M.B., B.S., F.R.C.S.
 (part-time).

Obstetric Surgeons :

E. ap. I. Rosser, M.B., B.S., M.R.C.O.G.
 Mrs. M. Rose, M.D., B.S., M.R.C.O.G.

Radiologist :

E. J. E. Topham, M.A., M.D., D.M.R.E.
 (Appointed Dec., 1946).

Pathologists :

J. L. Hamilton-Paterson, M.D., B.S.
 E. D. Hoare, M.A., M.D., B.Ch. (Appointed Nov.,
 1946).

Pædiatrician :

1 vacancy.

Director of Department of Physical Medicine :

1 vacancy.

Anæsthetist :

‡J. H. Attwood, M.B., B.S., D.A.

Chief Assistant :

1 vacancy.

Assistant Medical Officers : 9.*House Officers :* 4

1 vacancy.

Matron :

Miss E. R. Wheeldon.

* Staff as on 31st December, 1946.

‡ Deputy Medical Director.

CENTRAL MIDDLESEX COUNTY HOSPITAL.

Medical Director :

H. Joules, M.D., F.R.C.P.

Physicians :

‡F. Avery Jones, M.D., F.R.C.P.

R. A. J. Asher, M.B., B.S., M.R.C.P.

†J. Sakula, M.D., M.R.C.P., D.C.H.

Obstetric Surgeons :

J. S. MacVine, M.B., B.S., F.R.C.S., M.R.C.O.G.

Miss M. A. M. Bigby, M.D., M.R.C.O.G.

Anæsthetists :

Miss M. McClelland, M.B., B.S., D.A. (Resigned Feb., 1946).

Miss S. Ransom, M.R.C.S., L.R.C.P., D.A. (Resigned Sept., 1946).

I. Davenport-Jones, M.B., B.S., D.A. (Appointed June, 1946).

Pædiatrician :

R. MacKeith, M.A., D.M., M.R.C.P., D.C.H.

Surgeons :

T. G. I. James, B.Sc., M.Ch., F.R.C.S.

J. D. Fergusson, B.A., M.D., B.Chir., F.R.C.S.

†C. F. Chapple, M.B., B.S., F.R.C.S.

C. J. Evans, M.B., B.S., F.R.C.S. (Appointed Dec., 1946).

Pathologists :

J. D. A. Gray, B.Sc., M.B., Ch.B., F.R.C.P., D.P.H.

W. Pagel, M.D.

J. H. Humphrey, B.A., M.B., Ch.B. (Resigned Sept., 1946).

G. Discombe, B.Sc., M.B., B.S. (Appointed Dec., 1946).

Radiologist :

F. Pygott, M.B., Ch.B., D.P.H., D.M.R.E. (Appointed Sept., 1946).

Chief Assistants : 2.

1 vacancy.

Assistant Medical Officers : 8.

2 vacancies.

Matron :

Miss E. S. Laing.

HILLINGDON COUNTY HOSPITAL.

Medical Director :

W. A. Steel, M.D., F.R.C.P.

Physicians :

*E. B. Jackson, M.D., M.R.C.P.

C. R. Baxter, M.B., M.R.C.P.

1 vacancy.

Obstetric Surgeon :

Miss J. Morgan, M.D., M.R.C.O.G.

Anæsthetist :

H. J. V. Morton, M.A., M.D., D.A.

Director of Department of Physical Medicine :

1 vacancy.

Surgeons :

L. Fatti, M.B., B.S., F.R.C.S.

G. W. Duncan, M.B., B.S., F.R.C.S.

H. G. Hanley, M.D., F.R.C.S.

Pathologist :

J. S. B. Bray, B.A., M.R.C.S., L.R.C.P., D.C.P. (Resigned Oct., 1946).

H. Rogers, M.D., Ch.B. (Appointed Oct., 1946).

Chief Assistants : 1.

2 vacancies.

*Assistant Medical Officers : 7.**Matron :*

Miss E. Hagland.

* Acting Deputy Medical Director.

† In H.M. Forces.

‡ Deputy Medical Director.

WEST MIDDLESEX COUNTY HOSPITAL.

Medical Director :

R. L. Galloway, M.B., Ch.B., F.R.C.S.

Honorary Consulting Physician :

J. B. Cook, M.D., Ch.B., D.P.H.

Deputy Medical Director :

Miss M. W. Warren, M.R.C.S., L.R.C.P.

Physicians :

M. M. Deane, M.B., B.S., M.R.C.P., D.P.M., D.A.

J. A. Torrens, M.D., F.R.C.P.

F. J. V. Jenner, M.R.C.P.

Miss M. Dynski-Klein, M.D., D.C.H.

1 vacancy.

Obstetric Surgeons :

D. M. Stern, M.A., F.R.C.S., F.R.C.O.G.

Miss I. M. Titcomb, B.M., B.Ch., M.R.C.O.G.

C. W. F. Burnett, M.D., M.R.C.O.G.

1 vacancy.

Surgeons :

†W. J. Ferguson, M.S., F.R.C.S.

J. Scholefield, M.B., Ch.B., F.R.C.S.

Pædiatrician :

1 vacancy.

Pathologists :

A. C. Spence, M.R.C.S., L.R.C.P.

A. C. Counsell, M.B., B.S., D.P.H.

Director of Department of Physical Medicine :

1 vacancy.

Anæsthetists :

W. E. F. Evans, M.R.C.S., L.R.C.P., D.A. Miss E. M. Chivers, M.B., Ch.B., D.A.

(Transferred to Ashford County Hospital

Aug., 1946).

Assistant Medical Officers : 12.*Chief Assistant :*

1 vacancy.

House Officers : 7.*Matron :*

Miss A. Leslie.

§CHASE FARM EMERGENCY HOSPITAL.

Acting Medical Director :

C. A. Birch, M.D., F.R.C.P., D.P.H., D.C.H.

Ear, Nose and Throat Surgeon :

1 vacancy.

Physician :

1 vacancy.

Anæsthetist :

1 vacancy.

Radiologist :

1 vacancy.

Assistant Medical Officers : 1.

1 vacancy.

Surgeons :

‡H. O. Blauvelt, M.D., C.M., F.R.C.S.

1 vacancy.

Chief Assistants :

2 vacancies.

House Officers : 8.*Matron :*

Miss G. M. Jones.

§ASHFORD COUNTY HOSPITAL.

Medical Director :

G. Stephen, M.B., Ch.B., F.R.C.S.

Deputy Medical Director :

A. B. McLean, M.B., B.S., F.R.C.S.

Surgeon :

N. M. Matheson, M.B., B.Ch., F.R.C.S., M.R.C.P.

Anæsthetist :

W. E. F. Evans, M.R.C.S., L.R.C.P., D.A.

(Appointed Aug., 1946).

*Radiologist :*J. A. Brocklebank, M.D., B.S., M.R.C.P.,
D.M.R.E. (Appointed Oct., 1946).*Physician :*

A. Barham Carter, M.D., M.R.C.P., D.P.M.

K. D. Keele, M.D., B.S., M.R.C.P. (Appointed
Oct., 1946).*Chief Assistants :* 1.

2 vacancies.

Assistant Medical Officers : 2.*House Officers :* 5.*Matron :*

Miss E. P. McWilliam.

† In H.M. Forces.

‡ Deputy Medical Director.

§ The additional medical staff of this emergency hospital is provided by the Emergency Medical Service.

SUMMARY OF IMPORTANT STATISTICS RELATING TO THE ADMINISTRATIVE COUNTY OF MIDDLESEX.

Area (including inland water)	148,691 acres.
Population 1931 (census)	1,638,728
„ 1946	2,178,010
Number of structurally separate dwellings occupied, 1931 (census) ...	348,595
Number of private families, 1931 (census)	431,368
Rateable value	£22,284,960
Product of a penny rate, financial year	£89,677
Live births—	Males. Females. Total.
Legitimate	20,682 19,272 39,954
Illegitimate	1,133 1,021 2,154
Birth-rate... ..	19·3
Stillbirths	1,078
„ Rate per 1,000 total births... ..	25·0
Deaths	21,653
Death-rate	9·9
Number of women dying from diseases and accidents of pregnancy and childbirth :—	
From sepsis	13
From other causes	45
Maternal mortality rate per 1,000 live births	1·38
„ „ „ „ total „	1·34
Infantile mortality rate per 1,000 live births :—	
Legitimate	28·3
Illegitimate	53·4
Total	29·6
Deaths from cancer (all ages)	3,885
„ measles (all ages)	12
„ whooping cough (all ages)	27
„ diarrhoea (under 2 years of age)	114

Administrative County of Middlesex.

ANNUAL REPORT OF THE COUNTY MEDICAL OFFICER FOR THE YEAR 1946.

NATURAL AND SOCIAL CONDITIONS.

AREA.—The area of the County of Middlesex, inclusive of inland water, is 148,691 acres.

There are no county boroughs in Middlesex, so that the area of the administrative county coincides with that of the geographical county.

There are 26 separate local government areas in the County as follows:—15 municipal boroughs with an area of 70,196 acres and 11 urban districts with an area of 78,495 acres. There are no rural districts in the County.

POPULATION.—The estimated population in 1946 was 2,178,010, an increase of 220,010 on the previous year. Compared with 1945, the population has risen by over 11 per cent. and it is now 75,000 higher than the figure given by the Registrar-General at mid-1939, the previous highest total for Middlesex. It is evident that the tide of immigration into the County which was such a notable feature of pre-war years is showing signs of resuming its rise. The position is doubtless largely the result of persons from other areas seeking accommodation. Many local authorities in Middlesex have put in hand schemes for the provision of housing accommodation, and the results of this policy, especially in the completion of small semi-permanent types of houses, first began to become appreciable during 1946.

In the absence of other estimates, it has again been necessary to use the population figures provided by the Registrar-General for the calculation of death rates or the incidence of notifiable diseases among civilians, for the calculation of birth-rates in 1946.

The following table gives statistical information regarding the distribution of acreage and estimated population within the administrative county:

ACREAGE AND POPULATION.

Boroughs and Urban Districts.	Acreage.	Population.						Estimated by Registrar- General, 1946.
		Census.		Censal Increase or Decrease 1921–1931.				
				Persons.		Percentage.		
		1921.	1931.	In- crease.	De- crease.	In- crease.	De- crease.	
Acton (<i>Borough</i>)	2,318	60,817	70,008	9,191	—	15·1	—	65,150
Brentford and Chiswick (<i>Borough</i>)... ..	2,333	58,499	63,217	4,718	—	8·1	—	57,220
Ealing (<i>Borough</i>)	8,783	90,312	116,771	26,446	—	29·3	—	178,080
Edmonton (<i>Borough</i>)	3,896	66,807	77,658	10,851	—	16·2	—	104,120
Enfield	12,401	60,464	67,752	7,288	—	12·1	—	104,210
Feltham	4,925	11,392	16,064	4,672	—	41·0	—	38,740
Finchley (<i>Borough</i>)... ..	3,475	46,628	59,113	12,440	—	26·7	—	68,670
Friern Barnet	1,340	17,137	22,715	5,623	—	32·8	—	28,210
Harrow	12,559	49,020	96,656	47,636	—	97·2	—	210,890
Hayes and Harlington	5,160	9,042	22,969	13,927	—	154·0	—	64,650
Hendon (<i>Borough</i>)	10,373	57,566	115,640	58,074	—	100·9	—	153,820
Heston and Isleworth (<i>Borough</i>)... ..	7,219	47,463	76,254	28,791	—	60·7	—	104,240
Hornsey (<i>Borough</i>)... ..	2,872	87,632	95,416	7,784	—	8·9	—	93,050
Potters Bar	6,129	3,222	5,720	2,498	—	77·5	—	15,350
Ruislip-Northwood	6,583	9,112	16,035	6,923	—	76·0	—	62,070
Southall (<i>Borough</i>)	2,606	30,165	38,839	8,674	—	28·8	—	54,440
Southgate (<i>Borough</i>)	3,763	39,525	56,063	16,538	—	41·8	—	72,710
Staines	8,273	17,060	21,336	4,276	—	25·1	—	36,360
Sunbury	5,608	9,904	13,451	3,547	—	35·8	—	21,000
Tottenham (<i>Borough</i>)	3,013	146,726	157,667	10,941	—	7·5	—	124,830
Twickenham (<i>Borough</i>)	7,013	69,948	79,299	5,114	—	14·7	—	102,850
Uxbridge	10,240	20,626	31,887	11,261	—	54·6	—	48,520
Wembley (<i>Borough</i>)	6,292	18,239	65,799	47,560	—	260·8	—	129,850
Willesden (<i>Borough</i>)	4,633	165,742	185,025	19,296	—	11·6	—	170,550
Wood Green (<i>Borough</i>)	1,607	50,791	54,308	3,517	—	6·9	—	50,680
Yiewsley and West Drayton	5,277	9,163	13,066	3,903	—	42·6	—	17,750
The County	148,691	1,253,002	1,638,728	385,726	—	30·8	—	2,178,010

SOCIAL CONDITIONS.—The problem of providing adequate care for the aged is becoming increasingly grave and must give rise to very considerable anxiety. As is well known the proportion of elderly persons in the community is increasing. This is due to a number of reasons, including the falling birth-rate which only recently has been arrested and that possibly not permanently, and an improving expectation of life at all ages. The housing shortage and the necessity for most unmarried and many married women to go out to work has prevented many of these old people finding a domicile with their children, as has been the case in the past. They have been forced, in many instances, to be satisfied with the most inadequate accommodation, and lack very often even the minimum of care and attention, which their condition demands. Shortage of staff and the difficulty of obtaining suitable premises, renders the provision of adequate institutional accommodation for these unfortunates an almost insuperable task and the waiting lists for their admission grow daily longer. It is easier to state the problem than to suggest a solution but its urgency cannot be overstressed.

BIRTHS AND BIRTH-RATES.—Birth statistics for the last five years for Middlesex, London, the Great Towns, and England and Wales are given in the following table :—

Year.	The County		London	Great Towns	England and Wales
	Live births	Rate per 1,000 living	Rate per 1,000 living	Rate per 1,000 living	Rate per 1,000 living
1942	33,150	17·2	14·0	17·3	15·8
1943	35,339	18·2	15·8	18·6	16·5
1944	36,380	19·1	15·0	20·3	‡17·6
1945	33,398	17·1	15·7	19·1	‡16·1
1946	42,108	19·3	21·5	22·2	‡19·1

‡ Rates per 1,000 total population.

The birth-rate for Middlesex was 2·2 per 1,000 living above that of 1945 and was the highest recorded since 1921. The Registrar-General, in his summary for England and Wales for 1946, states : “ The effective reproduction rate corresponding to the births which occurred in 1946, after making allowance for a continuing improvement in survivorship conditions, is provisionally assessed at 1·102, indicating that the births of 1946 were 10 per cent. in excess of those required by a par replacement standard and representing a position not hitherto recorded since 1921. In view of the fact that 1946 is the first complete calendar year after the termination of the war, the experience must be expected to be an abnormal one.”

The following table shows the number of legitimate and illegitimate births, for each year since 1939 :—

	Legitimate births.				Illegitimate births.	
1939	30,612	1,259	
1940	28,356	1,161	
1941	25,888	1,339	
1942	31,547	1,603	
1943	33,557	1,782	
1944	34,375	2,005	
1945	31,042	2,356	
1946	39,954	2,154	

Mention was made in the previous report of the gradual annual increase during the war years in the number of illegitimate births. In 1946, however, while the number of legitimate births rose by nearly 9,000 as compared with the previous year, the illegitimate births fell by approximately 200. This, however, was not unexpected since the return and demobilisation of large numbers of men serving abroad would naturally tend to raise the number of pre-maritally conceived legitimate births with a corresponding reduction in the figures for illegitimate births.

Information regarding the births and birth-rates in each district in the County is set out in descending order of magnitude of birth-rate in the following table :—

BIRTHS AND BIRTH-RATES IN EACH DISTRICT, 1946.

Boroughs and Urban Districts.	Net Number.	Rate per 1,000 living.	Boroughs and Urban Districts.	Net Number.	Rate per 1,000 living.
Hornsey (<i>Borough</i>) ...	2,008	21·6 (17·7)	Acton (<i>Borough</i>) ...	1,288	19·8 (18·2)
Sunbury	449	21·4 (18·0)	Ealing (<i>Borough</i>) ...	3,505	19·7 (17·2)
Staines	775	21·3 (18·2)	Wood Green (<i>Borough</i>)	986	19·5 (15·4)
Yiewsley and West Drayton	372	21·0 (18·3)	Ruislip-Northwood ...	1,195	19·3 (17·2)
Enfield	2,174	20·9 (18·1)	Twickenham (<i>Borough</i>)	1,955	19·0 (16·8)
Willesden (<i>Borough</i>) ...	3,572	20·9 (19·0)	Harrow	3,934	18·7 (16·0)
Tottenham (<i>Borough</i>) ...	2,580	20·7 (18·0)	Potters Bar	283	18·4 (15·4)
Brentford and Chiswick (<i>Borough</i>)	1,165	20·4 (17·5)	Finchley (<i>Borough</i>) ...	1,207	17·6 (16·1)
Feltham	785	20·3 (19·3)	Friern Barnet	491	17·4 (14·2)
Hayes and Harlington ...	1,308	20·2 (19·0)	Heston and Isleworth (<i>Borough</i>)	1,805	17·3 (15·5)
Edmonton (<i>Borough</i>) ...	2,108	20·2 (17·0)	Hendon (<i>Borough</i>) ...	2,651	17·2 (16·3)
Southall (<i>Borough</i>) ...	1,090	20·0 (16·2)	Wembley (<i>Borough</i>) ...	2,237	17·2 (16·4)
Uxbridge	972	20·0 (18·0)	Southgate (<i>Borough</i>) ...	1,213	16·7 (15·0)

The corresponding birth-rates for the year 1945 are shown in brackets.

DEATHS AND DEATH-RATES (ALL CAUSES).—The comparative figures for Middlesex, London, the Great Towns and England and Wales as a whole are set out in the following table :—

Year	The County		London	Great Towns	England and Wales
	Deaths	Rate per 1,000 living	Rate per 1,000 living	Rate per 1,000 living	Rate per 1,000 living
1942	20,294	10·5	13·9	13·3	11·6
1943	21,397	11·0	15·0	14·2	12·1
1944	21,104	11·1	15·7	13·7	11·6
1945	20,523	10·5	13·8	13·5	11·4
1946	21,653	9·9	12·7	12·7	11·5

For the reasons mentioned in the report for 1941–42 the issue of a “ comparability factor ” for each county and county district has been suspended. Figures of the “ corrected ” death-rate are therefore not available.

The table which follows gives information as to the number of deaths and the death-rate in each district in Middlesex.

DEATHS AND DEATH-RATES IN EACH DISTRICT, 1946.

Boroughs and Urban Districts.	Under 1 year of age.		At all ages.	
	No.	Rate per 1,000 births.	No.	Recorded Rate per 1,000 living.
Acton (<i>Borough</i>)	36	28·0	722	11·1
Brentford and Chiswick (<i>Borough</i>)	31	26·6	686	12·0
Ealing (<i>Borough</i>)	93	26·5	1,799	10·1
Edmonton (<i>Borough</i>)	69	32·7	919	8·8
Enfield	80	36·8	1,022	9·8
Feltham	26	33·1	309	8·0
Finchley (<i>Borough</i>)	30	24·8	774	11·3
Friern Barnet	20	40·7	264	9·4
Harrow	119	30·2	1,816	8·6
Hayes and Harlington	32	24·5	451	7·0
Hendon (<i>Borough</i>)	77	29·0	1,481	9·6
Heston and Isleworth (<i>Borough</i>)	53	29·4	1,088	10·4
Hornsey (<i>Borough</i>)	54	26·9	1,112	12·0
Potters Bar	4	14·1	133	8·7
Ruislip-Northwood	36	30·1	482	7·8
Southall (<i>Borough</i>)	37	33·9	488	9·0
Southgate (<i>Borough</i>)	36	29·7	883	12·1
Staines	21	27·1	328	9·0
Sunbury	16	35·6	202	9·6
Tottenham (<i>Borough</i>)	88	34·1	1,491	11·9
Twickenham (<i>Borough</i>)	51	26·1	1,120	10·9
Uxbridge	29	29·8	460	9·5
Wembley (<i>Borough</i>)... ..	59	26·4	1,042	8·0
Willesden (<i>Borough</i>)	102	28·6	1,803	10·6
Wood Green (<i>Borough</i>)	34	34·5	629	12·4
Yiewsley and West Drayton	13	34·9	149	8·4
The County	1,246	29·6	21,653	9·9

CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE IN THE ADMINISTRATIVE
COUNTY OF MIDDLESEX, 1946.

Causes of Death.	All Ages	0—	1—	5—	15—	45—	65—
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Typhoid and paratyphoid fevers	2	—	—	—	—	1	1
2. Cerebro-spinal fever	19	1	6	1	5	6	—
3. Scarlet fever	3	—	—	2	—	1	—
4. Whooping cough	27	15	12	—	—	—	—
5. Diphtheria	13	—	4	5	3	1	—
6. Tuberculosis of respiratory system	894	3	4	7	497	295	88
7. Other forms of tuberculosis	145	6	23	25	67	13	11
8. Syphilitic diseases	145	3	—	—	12	65	65
9. Influenza	229	8	7	2	23	60	129
10. Measles	12	2	8	1	1	—	—
11. Acute polio-myelitis and polio-encephalitis	13	—	1	1	11	—	—
12. Acute infective encephalitis	19	—	—	1	8	5	5
13. Cancer of buccal cavity and œsophagus (M), uterus (F)	359	—	—	—	17	162	180
14. Cancer of stomach and duo- denum	597	—	—	—	39	201	357
15. Cancer of breast	443	—	—	—	37	232	174
16. Cancer of all other sites ...	2,486	—	8	13	184	962	1,319
17. Diabetes	146	—	—	1	9	39	97
18. Intra-cranial vascular lesions	2,201	1	1	—	45	482	1,672
19. Heart disease	5,511	—	—	7	191	1,188	4,125
20. Other diseases of circulatory system	993	—	—	—	25	195	773
21. Bronchitis	1,261	24	5	1	41	320	870
22. Pneumonia	1,078	185	36	7	51	212	587
23. Other respiratory diseases ...	261	5	2	—	39	119	96
24. Ulcer of stomach or duo- denum	263	—	—	—	39	113	111
25. Diarrhœa (under two years)	114	109	5	—	—	—	—
26. Appendicitis	84	1	6	9	18	28	22
27. Other digestive diseases ...	475	12	8	9	45	143	258
28. Nephritis	441	—	2	10	66	132	231
29. Puerperal and post-abortive sepsis	13	—	—	—	13	—	—
30. Other maternal causes ...	45	—	—	—	44	1	—
31. Premature birth	322	322	—	—	—	—	—
32. Congenital malformations, birth injury, and infantile diseases	540	468	14	11	18	23	6
33. Suicide	205	—	—	—	69	98	38
34. Road traffic accidents ...	195	—	6	22	60	47	60
35. Other violent causes ...	467	35	15	16	76	91	234
36. All other causes	1,632	46	41	41	203	344	957
All causes	21,653	1,246	214	192	1,956	5,579	12,466

For the first time since 1939 the annual death-rate has fallen below 10 per 1,000 persons living. The total number of deaths reported is actually greater by 130 than in 1945 but this is a much smaller percentage increase than the 11 per cent. rise in the total population of the County. Thus the net effect is a reduction in the death-rate from 10·5 to 9·9. Allowance should also be made for this population increase in comparing the figures for individual causes of death shown in the table above.

Among the individual causes the largest reduction is shown in the case of deaths from “Other violent causes” which have fallen from 675 to 467. This is the natural and welcome result of the elimination for the first time in six years of deaths attributable to enemy action. Among other conditions which show a marked reduction, after making allowances for the increase in population, are

tuberculosis of the respiratory system, syphilitic diseases, respiratory diseases not classified under other headings, ulcer of stomach or duodenum, and diarrhoea under the age of two years.

With regard to conditions showing a greater number of deaths than in 1945, such increase need only be regarded as of significance if it materially exceeds 10 per cent. In this category are included influenza (229 against 98), acute polio-myelitis and polio-encephalitis (13 against 5), other diseases of the circulatory system (993 against 853) and congenital malformations (540 against 450). It is somewhat difficult to suggest a possible cause for the rise in deaths under the last mentioned category, 468 of which occurred in the first year of life. Deaths attributable to prematurity have shown a corresponding reduction (322 against 348) and to some extent the two sets of figures may be regarded as complementary, since deaths due to congenital causes occurring in infants born before full-term might alternatively be classified as attributable to prematurity. Apart from this, however, recent statistical enquiries have suggested that certain conditions affecting the mother during pregnancy, e.g. German measles, may have a definite influence in the genesis of congenital malformations. Unfortunately reliable evidence bearing on this possibility is difficult to acquire as in the absence of information furnished either by notification or morbidity returns, a true picture of the incidence and distribution of any particular disease during a given period, cannot be obtained. Nevertheless the theory which has been propounded regarding the causation of congenital malformation would seem worthy of further careful testing through the medium of enquiries made at the ante-natal and infant welfare clinics.

Material rises are shown in the deaths due both to puerperal sepsis and to other maternal causes, and special reference is made to this in a later section of this report dealing with maternal mortality.

INFANTILE MORTALITY.—The infantile death-rate for 1946 constitutes a fresh low record. For the first time in the history of the County less than 30 infant deaths per 1,000 live births occurred, the previous lowest figure being 36·5 in 1944. The significance of this achievement may be better appreciated when it is pointed out that in under 50 years the infantile mortality rate has been reduced to less than a quarter of what it was at the beginning of the century. For the quinquennium 1901–1905 the average mortality rate was 124 per 1,000 live births. In other words, out of every four infants who would have died in 1948 had the conditions of 1901 persisted the lives of three have been saved thanks to the advances in medical science and social welfare.

The infantile mortality rate during the year for that part of the County for which the County Council is the maternity and child welfare authority was 29·7 per 1,000 live births.

The following table gives comparative information as to infantile deaths and death-rates in Middlesex, London, the Great Towns, and England and Wales.

Year.	The County.			London.	Great Towns.	England and Wales.
	Births.	Deaths under 1 year.	Rate per 1,000 live births.	Rate per 1,000 live births.	Rate per 1,000 live births.	Rate per 1,000 live births.
1942	33,150	1,558	47	60	59	49
1943	35,339	1,536	43	58	58	49
1944	36,380	1,327	36·5	61	52	46
1945	33,398	1,296	38·8	53	54	46
1946	42,108	1,246	29·6	41	46	43

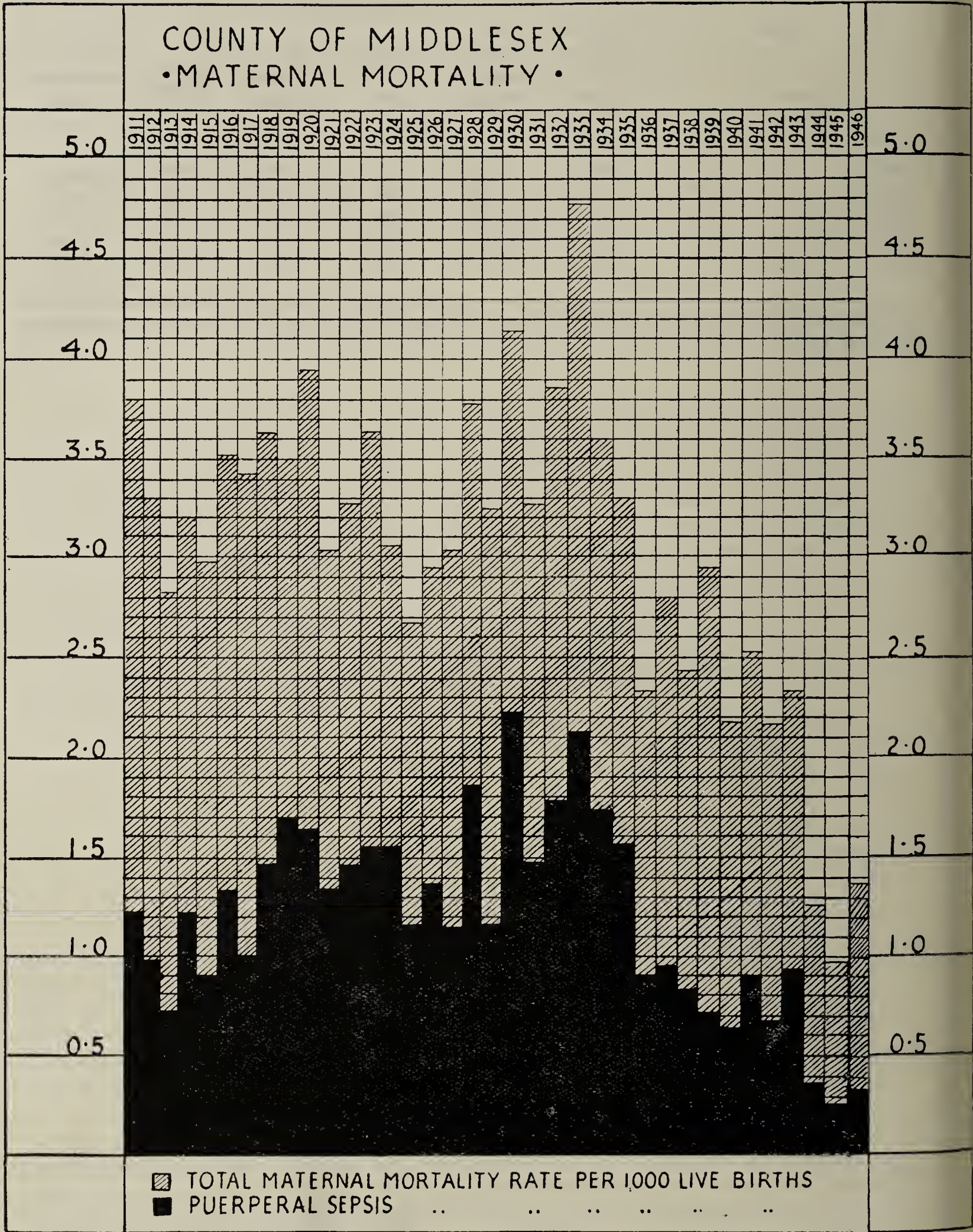
MATERNAL MORTALITY.—Unfortunately not quite so encouraging a picture can be painted in the case of maternal mortality. The year has shown a rise in the death rates both for puerperal sepsis and other causes, slight but yet sufficient to bring them above the low records for the two preceding years. The figures may well be a reflection of the strain thrown on an already over-burdened midwifery service by the rising birth-rate and indicate the necessity for taking prompt steps for the recruitment of an adequate additional number of midwives. In order to eke out the beds available it has been necessary both to refuse admission to a number of cases in which hospital confinement would have been desirable on one ground or another and also to discharge prematurely many of those who were admitted, even so early as the fourth day. This rapid turn-over had the inevitable effect of forcing midwifery staffs, in some instances already barely adequate in numbers for the beds they had to serve even under normal conditions, to work under conditions of severe and prolonged pressure. Under the circumstances the fact that the rise in the maternal mortality rate has not been greater, reflects credit on all concerned.

In all, 58 deaths of women in Middlesex during 1946, were due to causes connected with pregnancy and childbirth. These deaths are classified in the following table under the two categories into which they are separated statistically by the Registrar-General :—

Year.	Puerperal sepsis.		Other accidents and diseases of pregnancy and parturition.		Total.	
	Number of deaths.	Rate per 1,000 live births.	Number of deaths.	Rate per 1,000 live births.	Maternal deaths.	Maternal mortality rate.
1942	23	0·69	49	1·48	72	2·17
1943	33	0·93	49	1·39	82	2·32
1944	13	0·36	33	0·90	46	1·26
1945	9	0·27	24	0·72	33	0·99
1946	13	0·31	45	1·07	58	1·38

The diagram on page 8 illustrates in graphic form the variations in maternal mortality since the year 1911.

COUNTY OF MIDDLESEX
• MATERNAL MORTALITY •



GENERAL HOSPITALS.

The year 1946, following the end of the war in the previous year, was an unsatisfactory one with regard to progress. A period of reaction had set in and the will to work very hard which had brought the country through the war began to be dissipated when victory was won. This national inertia had its reflection in the work of the County hospitals. The need for the service never diminished, rather did it grow, but staff shortages, both nursing and domestic increased so that slowly but inevitably it became necessary to close beds—a state of affairs which the war had not been able to bring about. During 1946 some 800 hospital beds in Middlesex County hospitals were out of action through lack of nursing staff. For the most part the shortages were most apparent in those hospitals which had undergone very rapid expansion in the war and in these instances the very poor accommodation provided in temporary hutments for the resident staff is almost certainly one of the responsible factors. It must also be remembered that before the war it had been the Council's enlightened policy at all its hospitals to encourage most of its trained staff to live out and lead a more normal life off duty than that possible under the somewhat cloistered conditions of a nurses home. At most of its hospitals, therefore, the Council had provided no more nurses' home accommodation than was necessary to house student nurses and a few administrative sisters. Ward sisters and staff nurses with very few exceptions lived out and much preferred to do so. This policy, formerly an asset to recruiting, was changed by the war to a heavy liability. Shortage of housing, food rationing and fuel shortage, queues and the general difficulties of living conditions which bear so heavily upon private citizens, and especially upon women, lead nurses to choose to work in hospitals where comfortable nurses' home provision exists and where they may escape much of the drudgery and petty annoyances which fall to the lot of the householder.

The first steps in the improvement of the position will be to increase the nursing home provision at, or in connection with, County hospitals. To this end urgent representations were made to the Ministry of Health to give priority to the building of extensions to the nurses homes at Hillingdon, West Middlesex, Ashford, Chase Farm, Harefield and Clare Hall Hospitals, where the position was the most serious. Shortage of labour and materials, however, prevented any material progress beyond the drawing of plans except at West Middlesex County Hospital, where work was commenced on three ward blocks, unsatisfactory for the needs of patients, with a view to converting them into quarters for 64 nurses. The adaptation was very successful and the blocks were opened for nurses in 1947.

The severe restriction of building operations was the reason for many of the disappointments of 1946. Even where building work was actually put in hand shortage of labour and of materials made progress very slow. A number of decisions with regard to future schemes of expansion were taken by the County Council, a good deal of work went on in the preparation of architectural plans and here and there a little building work was done. Particulars of some of these limited activities are set out in the paragraphs which follow.

NORTH MIDDLESEX COUNTY HOSPITAL.—The building of an ante-natal clinic proceeded to take the place of that which was destroyed by enemy action. In order to bring more maternity beds into use it was decided to open negotiations with the Southgate Borough Council for the use of their excellent infectious diseases hospital as a maternity annexe. The Borough Council were most co-operative, the hospital was leased to the County Council and received its first maternity patients from the North Middlesex Hospital early in 1947.

CENTRAL MIDDLESEX COUNTY HOSPITAL.—Work proceeded in connection with the erection of two new pavilion wards of 30 beds each for pulmonary tuberculosis and these were opened in 1947.

Approval was given to the building in semi-permanent construction of a large department of physical medicine and rehabilitation.

As in the case of the North Middlesex Hospital arrangements were made with the Acton and Wembley Borough Councils to take over as a maternity annexe the Acton Isolation Hospital, which received the patients of both authorities.

HILLINGDON COUNTY HOSPITAL.—The County Council approved in principle the erection of a new hospital of approximately 1,000 beds on the site of the present hospital. This is the plan which would have been put into operation in 1939 but for the outbreak of war. In reaffirming in 1946 the desirability of proceeding with the rebuilding scheme at the earliest moment the County Council urged upon the Ministry of Health that as first instalments of the new hospital there should be built an extension of the nurses' home, a residency for the medical staff and a new power house. The Ministry of Health accepted the position as one of urgency and early in 1947 gave approval in principle to these works being carried out.

By the use of its own maintenance staff and salvaged material the County Council was successful in carrying out a small piece of reconstruction work, namely the conversion of one of the E.M.S. ward huts into a hospital dispensary, thus fulfilling a long-felt need and avoiding the further use of the ludicrously inadequate dispensary which perforce had hitherto served the hospital.

MEDICAL STAFFING OF THE COUNCIL'S HOSPITALS.

In 1945 the Council adopted a new system of medical staffing for its hospitals and instituted an improved salary scale. Because so many men were away, serving in the Forces, the Council did not hurry to bring the new system into operation, but meanwhile, it was recognised that the senior appointments to be made would have a great influence upon the development of the hospital service and accordingly it was necessary to devise a method of selection which would ensure, so far as possible, that the best men and women available would be appointed. In the National Health Service Act provision for this is made by the setting up of expert advisory committees for the making of senior medical appointments and the County Council decided to anticipate this measure by proceeding forthwith on rather similar lines. It was decided that for every senior appointment a small *ad hoc* professional committee should be formed consisting of the medical director and some of the senior members of the staff of the hospital to which the appointment was to be made, supplemented by a small number of senior men in the same or allied faculty from other of the County hospitals together with the County Medical Officer. To this small selection committee would be added one or two external assessors of high professional attainments and reputation, preferably nominated by the University of London. This committee would scrutinise the candidates' applications, made such further enquiries as were necessary and interview selected candidates, bringing a very small number before a committee of the County Council for final selection and appointment. The University of London agreed to cooperate and nominated the following external assessors :—

Medicine	... Professor Sir Francis Fraser, M.D., F.R.C.P.
Surgery	... Sir Ernest Rock Carling, F.R.C.S.
Obstetrics	... Mr. Eardley Holland, M.D., F.R.C.P., F.R.C.S., F.R.C.O.G.
Pathology	... Professor J. H. Dible, M.B., F.R.C.P.
Anæsthetics	... Mr. Ashley Daly, F.R.C.S., D.A.
Pædiatrics	... Dr. Charles Harris, M.D., F.R.C.P.
Radiology	... Dr. Cochrane Shanks, M.D., F.R.C.P.

The system was put into operation and worked smoothly and well. A number of senior medical appointments were made during 1946 ; information regarding these is set out in the paragraph which follows. In addition to the new appointments made a number of men and women were confirmed in the acting appointments they had held during the war. In every case these temporary appointments became permanent only after open competition following public advertisement.

The following new appointments to the Council's senior medical staff were made :—

North Middlesex County Hospital.—Pathologist, J. F. Heggie, M.B., Ch.B.

Redhill County Hospital.—Pathologist, E. D. Hoare, M.A., M.D., B.Ch. Radiologist, E. J. E. Topham, M.A., M.D., D.M.R.E.

Central Middlesex County Hospital.—Pathologist, G. Discombe, B.Sc., M.B., B.S. Radiologist, F. Pygott, M.B., Ch.B., D.P.H., D.M.R.E. Anæsthetist, I. Davenport Jones, M.B., B.S., D.A.

Hillingdon County Hospital.—Pathologist, H. Rogers, M.D., Ch.B.

Ashford County Hospital.—Physician, K. D. Keele, M.D., M.R.C.P. Radiologist, J. A. Brocklebank, M.D., M.R.C.P., D.M.R.E. Anæsthetist, W. E. F. Evans, M.R.C.S., L.R.C.P., D.A.

Clare Hall County Hospital.—Physician, Maxwell Telling, M.A., D.M., M.R.C.P.

Dr. K. R. Stokes, Medical Director of Harefield County Hospital, was created a Chevalier of the Legion of Honour by the President of the Provisional Government of France.

Dr. F. Avery Jones was elected a Fellow of the Royal College of Physicians of London, and Mr. David Stern a Fellow of the Royal College of Obstetricians and Gynæcologists.

INSPECTION AND SUPERVISION OF FOOD.

The Acts and Regulations governing the supervision of food supplies which are administered by the County Council deal with (a) certain powers and duties connected with the production of milk, and (b) adulteration of food.

MILK PRODUCTION.

Samples of milk are taken by inspectors of the Public Control Department either in course of retail or at the farms of origin, when these are situated in Middlesex, and submitted to examination for the presence of tubercle bacilli in the pathological laboratory of Harefield County Hospital. Prior to 1943 these examinations were carried out at the Lister Institute of Preventive Medicine and Harefield County Hospital commenced operations in May, 1943. The arrangements have continued to work very smoothly.

The following tables show the results which have been obtained for each of the last ten years :—

Year.	Number of samples for which a definite result was obtained.	Number containing living tubercle bacilli.	Percentage of tubercle-infected milk
1937	282	16	5·7
1938	278	16	5·7
1939	193	10	5·1
1940	267	19	7·1
1941	285	16	5·6
1942 (Jan.–June)	136	6	4·4
1943 (May–December)	256	4	1·6
1944	384	17	4·4
1945	376	8	2·1
1946	391	17	4·3

Ten of the 17 infected samples were produced in Middlesex. Diseased animals were traced at ten of the farms concerned, six of these being in Middlesex, and 12 cows were slaughtered.

The routine veterinary inspection of Middlesex herds is carried out by officials of the Ministry of Agriculture. The Divisional Inspector of the Ministry furnishes the County Council with information as to the results of veterinary inspections and tuberculin tests of Middlesex herds. The figures for the past six years are set out in the table below :—

Year.	Number of clinical examinations of bovine animals.	Number found in which tuberculosis was suspected.	Number slaughtered.	Number in which diagnosis was not confirmed.
1941	9,307	14	11	3
1942	8,582	21	18	3
1943	10,350	16	16	—
1944	5,279	20	19	1
1945	5,507	18	17	1
1946	4,589	19	19	—

MILK (SPECIAL DESIGNATIONS) ORDERS, 1936 AND 1938.—The County Council is responsible under these Orders for the granting of licences for the production of Tuberculin-tested and Accredited milk. Before the issue of any such licence, the farm concerned is visited by a senior medical officer, accompanied by the Milk Production Officer on the staff of the War Agricultural Executive Committee, or his assistant, and an enquiry is conducted into the condition of the premises and the herd and the suitability of the technique adopted. Notice of the visit is also sent to the local sanitary authority of the district where the farm is situated and usually either the medical officer of health or the senior sanitary inspector attends.

Following the issue of licences, regular routine samples of milk in the course of production are taken at the farms, and submitted to biochemical and bacteriological investigation with a view to ascertaining that a satisfactory standard of cleanliness is being maintained.

During 1946, licences for the production of Tuberculin-tested milk were granted to 16 farmers, while 29 received licences for the production of Accredited milk. Eight of the herds belonging to holders of T.T. licences were also attested under the scheme of the Ministry of Agriculture.

In addition to the measures of co-operation between the County Council, the Middlesex War Agricultural Executive Committee and the local sanitary authorities, which were recorded in the report on 1944, the Deputy County Medical Officer attended the quarterly meetings of the Milk Sub-Committee of the War Agricultural Executive Committee and advised the Committee on matters relating to clean milk production.

ADULTERATION.

The Acts and regulations dealing with adulteration of foods and drugs are administered by the Public Control department of the County Council. I am indebted to Mr. S. J. Pugh, Chief Officer of that department, for information regarding this branch of work.

During 1946, 1,500 samples, of which 85 were found to be adulterated or not up to standard, were submitted for examination by the County Analyst.

In addition to the above, 4,422 samples were examined by officers of the Public Control department.

No action was taken during the year under the Public Health (Dried Milk) Regulations, 1923, 1927 and 1943, or the Public Health (Condensed Milk) Regulations, 1923, 1927 and 1943.

DEFENCE (GENERAL) REGULATIONS, 1939—REGULATION 55G.

In January, 1944, Regulation 55G was made under the provisions of the Defence Regulations. This regulation empowers the Minister of Food to require that in areas “specified” by him all milk supplied to consumers, other than Accredited or Tuberculin-tested, shall be either pasteurised, heat-treated, or sterilised. Prescribed tests for ascertaining whether milk has been subjected to the proper treatment, have been laid down. The County Council is charged with the enforcement of the Regulation and is required to arrange for the sampling and testing of all the classes of milk covered by the Regulation.

Samples of “designated” milk taken at the farms on behalf of the County Council in pursuance of its function as the Licensing Authority, under the arrangements made by the Public Health Committee, are not affected by the Regulation. Other samples, taken in pursuance of the requirements of Regulation 55G, are procured and dealt with through the Public Control Department of the County Council.

The following table which has been supplied to me by Mr. Pugh, sets out details of the samples taken by officers of his department during 1946.

PARTICULARS OF SAMPLES OF MILK PROCURED BY OFFICERS OF THE PUBLIC CONTROL DEPARTMENT DURING 1946, IN PURSUANCE OF REGULATION 55G OF THE DEFENCE (GENERAL) REGULATIONS, 1939.

	Passed.	Failed.	No Test Applied.	No. of Samples Examined.
<i>Pasteurised Milk—</i>				
Phosphatase test	227	10	—	} 237
Methylene blue test...	216	17	4	
<i>Tuberculin Tested (Pasteurised) Milk—</i>				
Phosphatase test	5	1	—	} 6
Methylene blue test...	6	—	—	
<i>Heat-treated Milk—</i>				
Phosphatase test	172	8	—	} 180
Methylene blue test...	158	20	2	
<i>Sterilised Milk—</i>				
Phosphatase test	33	—	—	} 33
Methylene blue test...	33	—	—	
Total number of samples examined during period				456

All samples were subjected to the tests prescribed by the Heat-treated Milk (Prescribed Tests) Order, 1944, except where it was not possible to keep samples at an atmospheric shade temperature not exceeding 65° Fahrenheit in which cases no Methylene Blue Test was applied.

MATERNITY AND CHILD WELFARE.

ADMINISTRATION OF MIDWIVES ACTS, 1902-1936.

AREA.—Throughout 1946 the County Council was the Local Supervising Authority for the whole of the County, with the exception of the Boroughs of Ealing, Edmonton, Hendon, Heston and Isleworth, Tottenham, Twickenham and Willesden, and the urban districts of Enfield and Harrow.

DOMICILIARY SERVICE OF MIDWIVES.—The number of confinements attended by the domiciliary midwives engaged in carrying out the Council's scheme was higher by 1,224 than in 1945, a rise of over 30 per cent., and was due to the substantial increase in the number of births.

The following table sets out particulars of the number of whole-time salaried midwives engaged in the various parts of the Council's area, whether employed by the County Council or by local welfare councils on their behalf, or by voluntary associations subsidised by the County Council; together with information as to the number of confinements attended in the capacity of either midwife or maternity nurse.

Borough or District.	Midwives employed by.	Number of whole-time salaried midwives at end of year.	Confinements attended.
Acton	} Queen Charlotte's Hospital ...	4	583
Brentford and Chiswick ...			
Feltham	County Council	6	296
Finchley	Borough Council	4	209
Friern Barnet	County Council	2	112
Hayes and Harlington ...	" "	8	408
Hornsey	Borough Council	6	547
Potters Bar	*South Mimms, Potters Bar, and Bentley Heath Nursing Association	2	128
Ruislip-Northwood	County Council	5	263
Southall	Borough Council	5	299
Southgate	Southgate Queen's Nursing Association	3	262
Staines—			
Ashford	Ashford District Nursing Association	2	147
Laleham and Staines ...	Staines and Laleham Nurse Society	2	105
Stanwell	Stanwell District Nursing Association	2	89
Sunbury—	County Council	2	86
Shepperton	Shepperton and Littleton District Nursing Association	1	73
Uxbridge	County Council	4	273
Wembley	Kingsbury District Nursing Association	3	198
,,	Wembley District Nursing Association	4	389
Wood Green	Borough Council	4	369
Yiewsley and West Drayton	County Council	3	119
	Totals	72	4,955

* Midwifery undertaken by the County Council as from 1st April, 1946.

HOSPITAL SAVING ASSOCIATION SCHEME—During 1946 the Hospital Saving Association made payment to the County Council in respect of each confinement of a woman contributor or the wife of a contributor attended by a midwife under the Council's midwifery service. No charge is made to the woman for the midwife's services, or for those of a doctor, should one be summoned by the midwife to her aid.

BIRTHS ATTENDED BY MIDWIVES.—Of the total number of midwives residing in the area of Middlesex supervised by the County Council, who notified their intention to practise, returns were received from 103 who had actually practised in 1946, setting out the number of cases attended by them in the capacity of midwife or maternity nurse. Medical officers of health of boroughs

and urban districts in the County, which also are local supervising authorities, have been good enough to supply me with similar information relating to their respective districts, so that it has been possible to compile the following comprehensive table referring to the entire administrative county.

Boroughs and Urban Districts.	Births attended by Midwives.		Births at which Midwives acted as Nurses.	
	In patients' homes.	In nursing homes.	In patients' homes.	In nursing homes.
Acton	566	—	18	—
Brentford and Chiswick ...			—	—
Feltham	268	—	28	—
Finchley	186	44	23	60
Friern Barnet	132	—	59	—
Hayes and Harlington	437	—	44	54
Hornsey	500	—	52	190
Potters Bar	105	—	42	—
Ruislip-Northwood	290	23	50	200
Southall	347	131	61	96
Southgate	174	9	91	807
Staines	207	—	134	—
Sunbury	79	—	7	—
Uxbridge	226	3	128	—
Wembley	349	22	259	6
Wood Green	316	—	117	—
Yiewsley and West Drayton ...	101	—	18	—
Attended by midwives residing outside the County Council's area ...	20	—	11	—
Totals	4,303	232	1,142	1,413
Ealing	663	178	117	329
Edmonton	926	—	128	—
Enfield	682	—	441	8
Harrow	778	41	317	1,123
Hendon	578	11	185	184
Heston and Isleworth	286	—	86	353
Tottenham	1,383	—	145	—
Twickenham	362	15	149	433
Willesden	890	—	205	31
Grand Totals	10,851	477	2,915	3,874

The total number of births in the whole County in 1946 was 42,108, and 11,328 (27 per cent.) of these were attended by midwives, whilst 6,789 (16 per cent.) were attended by practising midwives in the capacity of maternity nurses.

NOTIFICATIONS.—The numbers of notifications received from midwives, in accordance with the Rules of the Central Midwives Board, during the years 1942–46, were as follows :—

Notifications of :—	1942.	1943.	1944.	1945.	1946.
Sending for medical assistance	1,582	1,508	1,588	1,302	1,834
Still-birth	62	73	59	35	52
Death of infant	47	35	33	26	30
Death of mother	2	1	—	—	—
Laying out the dead	16	15	16	18	27
Artificial feeding	64	67	72	85	60
Liability to be a source of infection ...	150	143	121	86	101
Totals	1,923	1,842	1,889	1,552	2,104

MATERNAL DEATHS.—No deaths occurred of any women attended by a midwife.
The maternal death-rate for all births in the administrative County during 1946 was 1.38 per 1,000.

PUERPERAL PYREXIA.—The following table records the number of notifications of puerperal pyrexia (a) in the county generally, and (b) in the area for which the County Council is the local supervising authority, together with details concerning midwives' cases in the latter area.

Year.	Births registered.		Cases notified.		Deaths from puerperal sepsis.		Births attended by Midwives.	Cases notified in the practices of Midwives.	Deaths from puerperal sepsis in the practices of Midwives.
	(a)	(b)	(a)	(b)	(a)	(b)	(b)	(b)	(b)
1940	29,517	12,573	361	75	18	11	4,924	21	1
1941	26,927	11,719	408	104	23	8	4,320	19	Nil
1942	33,150	14,224	552	177	23	15	4,755	29	Nil
1943	35,339	15,076	639	171	33	16	4,483	26	3
1944	36,380	15,606	541	166	13	7	4,381	10	2
1945	33,398	14,203	491	147	9	3	3,463	7	Nil
1946	42,108	17,824	518	162	13	4	4,535	9	Nil

OPHTHALMIA NEONATORUM.—Medical assistance was sought by certified midwives on account of inflammation of, or discharge from, infants' eyes in 141 instances; and in 12 of these cases the medical practitioners called in notified the condition as ophthalmia neonatorum. No apparent injury to vision resulted in any instance.

VISITS OF INSPECTION.—Visits made by the Council's supervisors of midwives may be classified as follows:—

Visits to State certified midwives	...	...	...	...	...	661
„ premises in connection with the registration of nursing homes						18
„ registered nursing homes	...	...	...	...	...	170
„ ante-natal clinics and welfare centres	...	...	...	...	...	68
„ homes of foster-mothers in connection with child life protection						11
„ other persons in connection with investigations under the Midwives Acts, &c.	...	...	...	...	...	83
„ in connection with home help scheme						144
„ „ „ „ agencies for the supply of nurses						27
Total...	...	...	...	...	...	1,182

POST-CERTIFICATE INSTRUCTION.—Arrangements were made for four midwives to receive a course of instruction in the administration of gas and air analgesia. Two courses of post-certificate instruction in midwifery, arranged in conjunction with the London County Council, were held, at which thirty-eight midwives from the area supervised by the County Council attended.

PAYMENT OF FEES TO MEDICAL PRACTITIONERS.—The following table gives information regarding fees paid by the County Council to medical practitioners called in by midwives on account of illness or abnormality occurring during pregnancy, labour or puerperium.

A	B		C	D
Number of notifications of sending for medical aid.	Number of claims for fees received.	Percentage of B to A.	Total amount due to doctors in respect of cases attended by them during financial year.	Income from patients in respect of doctors' fees.
1,834	1,192	64.99	£ s. d. 1,872 0 0	£ s. d. 937 0 0

NURSING HOMES.

The following table shows the number of registered nursing homes in each borough and urban district for which the County Council is the authority for the supervision of nursing homes. The figures in brackets indicate the number of homes devoted, either wholly or in part, to the reception of maternity cases.

Boroughs and Urban Districts.	Number of Nursing Homes on Register at end of year.	Approved accommodation (beds) at end of year.
Acton (<i>Borough</i>)	3 (0)	12
Brentford and Chiswick (<i>Borough</i>)	1 (0)	6
Feltham	1 (0)	6
Finchley (<i>Borough</i>)	13 (3)	109
Friern Barnet	1 (1)	5
Hayes and Harlington	1 (1)	4
Hornsey (<i>Borough</i>)	11 (4)	97
Potters Bar	0 (0)	0
Ruislip-Northwood	7 (6)	35
Southall (<i>Borough</i>)	2 (1)	29
Southgate (<i>Borough</i>)	7 (7)	61
Staines	1 (0)	13
Sunbury	2 (1)	59
Uxbridge	2 (0)	27
Wembley (<i>Borough</i>)	4 (1)	26
Wood Green (<i>Borough</i>)	0 (0)	0
Yiewsley and West Drayton	0 (0)	0
Totals	56 (25)	489

BIRTHS OCCURRING IN NURSING HOMES.—The following table sets out particulars of births which occurred in nursing homes.

Attended by	County Council's Area.	Ealing	Edmonton	Enfield	Harrow	Hendon	Heston & Isleworth	Tottenham	Twickenham	Willesden	Administrative County
(a) Doctors ...	2,456	629	0	8	292	352	353	0	433	31	4,554
(b) State certified midwives, no doctor being in attendance ...	362	178	0	0	41	11	0	0	15	0	607
Totals ...	2,818	807	0	8	333	363	353	0	448	31	5,161

UNREGISTERED NURSING HOME.—Legal proceedings were instituted against the keeper of a home which was being carried on as a nursing home without being duly registered. A conviction was recorded but only a nominal fine was imposed in view of the great difficulty in securing alternative accommodation for old persons of the type living at the premises.

MATERNITY AND CHILD WELFARE SERVICE.

The County Council is the authority for maternity and child welfare in 9 of the 26 districts included in the administrative County, viz., the Urban Districts of Feltham, Friern Barnet, Hayes and Harlington, Potters Bar, Ruislip-Northwood, Staines, Sunbury, Uxbridge, and Yiewsley and West Drayton.

The following is a summary of certain statistics relating to the maternity and child welfare area of the County Council :—

Area	53,535 acres
Population (estimated by Registrar-General)	332,650
Live births	6,630
Birth-rate	19.9
Number of infant deaths	197
Infantile mortality rate, per 1,000 live births	29.7
Number of maternal deaths	10
Maternal mortality rate, per 1,000 total births	1.48
Number of cases of puerperal pyrexia	79
„ ophthalmia neonatorum	6

During 1946 two additional health visitors and school nurses were engaged. No new centres were opened.

HOME VISITS BY HEALTH VISITORS.—The home visiting undertaken by the County Council's health visitors is shown in the following table :—

Pre-natal visits	...	...	...	...	...	5,219
Visits to infants under 1 year	...	...	...	...	...	22,560
Visits to children (1-5 years)	...	...	...	...	...	25,803
Total home visits	...	...	...	...	...	53,582
Total number of visits to individual families	...	...	...	...	...	47,126

ATTENDANCES AT WELFARE CENTRES.—The following table gives the attendances of women and children at the Council's welfare centres :—

Ante-natal Clinics—

Number of sessions held	...	...	...	...	...	1,456
New cases attending	...	...	...	...	...	4,604
Post-natal cases attending	...	...	...	...	...	448
Total attendances	...	...	...	...	...	24,155

Welfare Centres—

Number of sessions held	...	...	...	...	...	3,576
New cases attending—						
Expectant mothers	...	...	...	...	...	122
Infants under 1 year of age	...	...	...	...	...	5,236
Children (1 to 5 years)	...	...	...	...	...	950

Attendances—

Expectant mothers	...	...	...	...	...	593
Mothers attending with infants	128,697
Infants	90,163
Children (1-5 years)	51,859

Total attendances	271,312
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Average attendance of infants and children each session	40
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PROVISION OF MILK, &C.—The following table gives information as to the cost of fresh and dried milk, &c., issued at the centres during the *financial* year 1946-47 :—

Year 1946-47.	Cost price.	Contributed by mothers.	Charge on scheme.
	£ s. d.	£ s. d.	£ s. d.
Fresh milk	1 0 0	Nil.	1 0 0
Dried milk	7,923 0 0	6,705 0 0	1,218 0 0
Cod-liver oil, malt, &c.			
Totals	7,924 0 0	6,705 0 0	1,219 0 0

ORTHOPAEDIC SERVICE.—Arrangements are in operation whereby children below the age of five in attendance at the welfare centres can receive treatment at the orthopaedic clinics dealing with school children. Fifty-two children were referred during 1946.

CHILD GUIDANCE SERVICE.—Problem children in need of investigation and treatment by psychiatrists are referred to the child guidance clinics established by the Education Committee at Harrow and Twickenham. Parents, except in necessitous cases, are asked to contribute 5s. for a course of treatment. Seven children were referred for treatment during 1946.

OPHTHALMIC TREATMENT.—The following table gives details relating to cases referred from ante-natal or welfare clinics to school ophthalmic clinics during 1946.

	Mothers.	Children.
Number of cases refracted—		
(a) For the first time	101	123
(b) Retests	3	75
Number of spectacles supplied	50	96
Change of lens supplied	23	52
Number of repairs to spectacles	26	
Number of cases referred to hospital	12	

TREATMENT OF OPHTHALMIA NEONATORUM.—During 1946, 7 cases of ophthalmia neonatorum were notified in the area for which the County Council is the authority for maternity and child welfare. Four infants were removed to White Oak Hospital, Swanley, Kent, by arrangement with the London County Council, while the remainder were treated in the hospitals in which they had been born. All the infants made satisfactory recoveries.

DENTAL TREATMENT.—In order to encourage expectant and nursing mothers to take advantage of the Council's scheme for dental treatment a nominal fee of 2s. 6d. only is now charged to cover all extractions and fillings required by a mother during her pregnancy and the twelve months following confinement.

The following tables gives particulars of the dental work which has been carried out under the Council's maternity and child welfare scheme :—

(1) MOTHERS

	Expectant Mothers.	Nursing Mothers.	Totals.
Attendances	4,477	3,002	7,479
Examined	1,075	275	1,350
Referred	901	231	1,132
Actually treated	818	271	1,089
Extractions	2,590	1,166	3,756
Fillings	2,523	871	3,394
Local anæsthetics	513	225	738
General anæsthetics	380	151	531
Other operations	1,359	716	2,075
Dental dressings	632	1,262	1,894
Dentures fitted	222	490	712
Treatments completed	555	467	1,022

(2) CHILDREN

	Welfare Children.	Nursery Children.	Totals.
Attendances	1,922	131	2,053
Examined	724	*554	1,278
Referred	483	*183	666
Actually treated	567	79	646
Extractions	649	35	684
Fillings	1,380	147	1,527
Local anæsthetics	12	—	12
General anæsthetics	268	13	281
Other operations	703	39	742
Treatments completed	620	61	681

* These totals include inspections at day nurseries.

The number of births in the County Council's welfare area during the year was 6,630. The number of expectant mothers dentally inspected was 1,075, or approximately 16·2 per cent. of the whole.

HOME HELPS.—This scheme has been continued throughout the year 1946.

Further appointments are being made whenever suitable women can be found to undertake the work in the districts in which they are required, and by the end of the year 55 such women were employed by the County Council as whole-time home helps, in addition to three in part-time employment.

ILLEGITIMATE CHILDREN.—The arrangements with the British Red Cross Society for the admission of unmarried mothers and their babies to a post-natal hostel, and of expectant unmarried mothers who, for various reasons, could not remain in their own homes, or had no homes, to an ante-natal hostel, prior to confinement, were continued during 1946. During the year there were 71 admissions to the ante-natal hostel and 103 to the post-natal hostel.

CHILD LIFE PROTECTION.

The position to the end of 1946 was that there were 155 persons on the Council's register receiving 206 children.

No deaths were reported during the year.

The following visits were paid by the Council's child protection visitors :—

First visits	...	...	...	...	...	...	...	...	...	80
Subsequent visits	...	...	...	...	...	...	...	...	...	907
Special investigations	...	...	...	...	...	...	...	...	...	11

THE ADOPTION OF CHILDREN (REGULATION) ACT, 1939.

The above Act came into force on 1st June, 1943. In accordance with Section 2, adoption societies are required to apply for registration, and two societies, whose offices are situated in the County of Middlesex, have been registered :—

Harrow and Willesden Ruri-Decanal Association for Moral Welfare Work	...	...	...	...	...	...	4, Peterborough Road, Harrow.
Homeless Children Aid and Adoption Society and F. B. Meyer Children's Home	...	...	...	...	...	...	Wood Green.

Section 7 (3) of the Act makes it a duty for persons, other than adoption societies, participating in arrangements for adoption, to give notice in writing of the arrangements to the welfare authority for the area in which the adopter resides. The authority's child protection visitors then supervise any child received by the adopters until legal adoption has taken place or the child attains the age of nine years. 22 persons gave notice in accordance with this Section to the County Council as welfare authority and informal notification was received in connection with a further 7 adopters. Legal adoption was completed in 95 instances and at the close of the year proceedings were pending in a further 20.

NURSERIES.

On 1st January, 1946, 26 day nurseries were in operation. All were seriously understaffed owing to the fact that many members of the staff, who had undertaken nursery work for the duration of the war, had resigned their appointments, but not more than 70 per cent. of the places provided for children were occupied. Attendances at the Yiewsley Day Nursery dropped to a daily average of 13 in January, and this nursery was therefore closed on 22nd January, 1946.

At the end of March, the 100 per cent. grant made by the Ministry of Health to cover expenditure on nurseries was withdrawn and replaced by a special 50 per cent. grant. In accordance with previous recommendations of the Ministry of Health, arrangements had been made for certain of the nurseries to be converted into nursery schools and clinics, but in March, approval was given by the Ministry of Health for the scheme to be amended and for all the 25 war-time nurseries to be retained as day nurseries.

The staff shortage became more acute, however, and during the next four months it was necessary to close nine of the poorly attended nurseries and to concentrate the remaining staff in areas where the need was greatest. It was, however, possible to re-open one of the Hanworth nurseries later in the year. Details of the closing of these nine nurseries, attendances during the period open, and of the subsequent use of the premises are set out below :—

Nursery.	Accommodation.	Daily Average Attendance.	Date Closed.	Subsequent Use of Premises.
Avondale Road, Ashford ...	50	21.44	19.7.46	Loaned to Education Committee as training centre for nursery students.
Woodthorpe Road, Ashford ...	40	22.58	18.3.46	Transferred to Education Committee.
Feltham Hill	40	13.62	15.3.46	Transferred to Education Committee and reopened as a nursery school.
Bear Road, Hanworth ...	50	30.56	29.3.46	Retained and reopened on 21st October, 1946.
Mountside, Hanworth ...	40	36.00	16.10.46	Site derequisitioned and returned to Feltham Urban District Council, for housing purposes.
Wood End Park, Hayes ...	40	17.76	22.3.46	Retained and converted for use as midwives' residence.
Yeading Lane, Hayes ...	40	24.87	18.4.46	Transferred to Education Committee.
South Hillingdon	50	25.74	16.3.46	Occupied by "Squatters." Transferred to Uxbridge Urban District Council for temporary housing purposes.
Sunbury	40	16.14	14.6.46	Transferred to Education Committee and reopened as nursery school.

The remaining 16 nurseries were retained as day nurseries and were open for the whole year.

The accommodation provided and average daily attendances are set out in the following table :—

Name of Nursery.	Accommodation.	Average Daily Attendances.
Park Road Day Nursery, Ashford	50	46.57
Bedfont Day Nursery	40	38.18
Central Feltham Day Nursery, High Street, Feltham ...	50	41.60
Grange Park Day Nursery, Hayes, Middlesex	80	45.10
Lannock Road Day Nursery, Hayes, Middlesex	50	33.04
Nestle's Avenue Day Nursery, Hayes	50	37.89
Uxbridge Road Day Nursery, Hayes	50	42.36
Oak Farm Day Nursery, Hillingdon	80	42.41
Ruislip Manor Day Nursery	40	28.22
South Ruislip Day Nursery	50	41.84
Shepperton Day Nursery	50	26.99
Staines Day Nursery	40	29.00
St. Anne's Day Nursery, Stanwell	50	41.65
High Street Day Nursery, Uxbridge	50	38.36
Cowley Road Day Nursery, Uxbridge	25	18.81
West Drayton Day Nursery	50	33.87

Total number of attendances in nurseries open for the whole year ... 163,684

Total number of places in nurseries open for the whole year ... 805

Total average daily attendances in nurseries open for the whole year 36.90

The incidence of infection during the year showed no marked change except that there was an increase in the number of cases of whooping cough from 43 in 1945 to 87, and an expected decrease in the number of cases of measles from 406 in 1945 to 80.

As in previous years, no new children were admitted to the nurseries for the appropriate quarantine period after the occurrence of a case of measles, whooping cough or scarlet fever. There were no cases of diphtheria.

The number of days each nursery was closed for new admissions is given below :—

Nursery.	Days Open.	Days Closed for Admission.
Avondale Road Day Nursery, Ashford	143	14
Park Road Day Nursery, Ashford	252	31
Woodthorpe Road Day Nursery, Ashford	55	—
Bedfont Day Nursery	287	63
Feltham Hill Day Nursery, Feltham	53	—
Central Feltham Day Nursery, Feltham	301	114
Bear Road Day Nursery, Hanworth	103	2
Mountside Day Nursery, Hanworth	210	—
Grange Park Day Nursery, Hayes	299	65
Lannock Road Day Nursery, Hayes	282	70
Nestle's Avenue Day Nursery, Hayes	301	95
Uxbridge Road Day Nursery, Hayes	256	7
Wood End Park Day Nursery, Hayes	59	—
Yeading Lane Day Nursery, Hayes	88	45
Oak Farm Day Nursery, Hillingdon	298	72
South Hillingdon Day Nursery	54	—
Ruislip Manor Day Nursery	258	114
South Ruislip Day Nursery	287	51
Shepperton Day Nursery	216	—
Staines Day Nursery	301	93
St. Anne's Day Nursery, Stanwell	294	—
Sunbury Day Nursery	116	—
Cowley Road Day Nursery, Uxbridge	254	39
Day Nursery, High Street, Uxbridge	283	71
West Drayton Day Nursery	267	—
Yiewsley Day Nursery	16	—

RESIDENTIAL ACCOMMODATION.

Bourne House Short Stay Residential Nursery was opened with accommodation for 16 children on 1st January, 1946, and 115 children were accommodated during the year.

TRAINING OF NURSERY NURSES.

The training of nursery nurses was continued during 1946, and seven students obtained certificates awarded by the County Council. The last examination of the National Society of Children's Nurseries was held in May, and the eight candidates who entered all passed, four with distinction.

The syllabus of training was altered in April in accordance with the requirements of the newly-formed National Nursery Examination Board, and the two candidates who entered for the first examination of the Board in November were both successful.

INFECTIOUS DISEASES.

The following table sets out figures showing the incidence of notifiable infectious diseases in Middlesex during 1946 :—

Disease.	Cases notified.	Case-rate per 1,000 population.	Fatal cases.	Case-mortality rate per cent.	Death-rate per 1,000 population.
Scarlet fever	3,267	1.50	3	0.09	0.001
Diphtheria	350	0.16	13	3.70	0.006
Dysentery	352	0.16	—	—	—
Enteric fever	16	0.007	2	12.5	0.001
Erysipelas	482	0.22	—	—	—
Cerebro-spinal fever	108	0.05	19	17.6	0.009
Encephalitis lethargica, acute	6	0.003	—	—	—
Poliomyelitis, acute	65	0.03	13		
Polioencephalitis, acute	4	0.002			
Measles	10,126	4.65	12	0.12	0.006
Whooping cough	4,209	1.93	27	0.64	0.01
†Pneumonia (acute)	1,837	0.84	—	—	—
† „ (all forms)	—	—	1,078	—	0.49
Puerperal pyrexia	518	12.3†	13	2.51	0.31§
Ophthalmia neonatorum	127	3.02†	—	—	—
Malaria	48	0.02	—	—	—

† Case-mortality rate cannot be given, as only cases of acute pneumonia are notified, while the figure for deaths includes all forms of the disease.
‡ Case-rate per 1,000 live births.
§ Death-rate per 1,000 live births.

SCARLET FEVER.—As in the previous year the disease was of a mild type. Only three deaths occurred, showing a case-mortality rate of under one per thousand.

DYSENTERY.—A marked reduction in incidence is indicated by comparison with 1945, the number of cases notified totalling approximately one-half the figure for the preceding twelve months. The number of cases reported showed a sharp decline in the latter half of the year.

There is little doubt that the source of much of the gastro-intestinal infection which hitherto has been becoming increasingly prevalent year by year is to be found in the often unsatisfactory conditions accompanying the handling of food and cleansing of utensils in the many communal feeding centres now so widely patronised by the public. It is to be hoped that due appreciation of the risks involved on the part of those employed in such centres and a consequent higher standard of cleanliness all round, will lead to the continuance of the present satisfactory downward trend in the incidence of cases of dysentery.

ACUTE POLIOMYELITIS AND ACUTE POLIOENCEPHALITIS.—The definite rise in incidence noted in last year's report was maintained during 1946. While the case rate remained approximately the same, the fatalities increased from 5 to 13 representing a case mortality of approximately 19 per cent.

CEREBRO-SPINAL FEVER.—Of the 108 notifications received during the year, 84 were recorded during the first six months ; 54 or one-half, during the first quarter.

MEASLES.—Although not so marked as is frequently the case, the tendency of this disease to a biennial fluctuation in incidence is shown by comparison with the figures for 1945, when more than twice the number of cases of measles were notified, with a case-rate of 11.34 per 1,000 as against 4.65 per 1,000 for 1946, and 28 deaths as against 12.

WHOOPING COUGH.—The cases notified showed a rise of 50 per cent. by comparison with the previous year. All the fatal cases (27) occurred in children under five years of age.

OPHTHALMIA NEONATORUM.—A satisfactory decrease in the number of cases reported was experienced as compared with 1945, with a case-rate of 3.02 per 1,000 births as against 5.42.

MALARIA.—48 cases occurred, as against 12 in the previous year ; 41 cases were believed to have been contracted abroad, and the victims were mostly members of the Forces returning to this country. In one case the disease had been induced for therapeutic purposes.

DIPHTHERIA.—The low figures of the previous two years were maintained during 1946, indicating the protection afforded by immunisation. The death-rate, 0·006 per 1,000 persons, is the lowest ever recorded in Middlesex.

DIPHTHERIA IMMUNISATION.—The following table shows estimates of the numbers of children in each of the age groups 0–5 years and 5–15 years who were believed to have been protected by immunisation against diphtheria at 31st December, 1946, and the percentages so protected of the total population at risk in each district and in the County, based on estimates of the population as at 30th June, 1946, furnished by the Registrar-General.

In regard to the older age group, it should be appreciated that the figures given do not show the numbers of children who have received re-inforcement injections, as is desirable, at or soon after attaining the age of 5 years and therefore the percentages given do not indicate the percentages of children enjoying *maximum* protection, which would be considerably lower. In the absence of re-inforcement injections, there is probably little more protection against infection by diphtheria in later childhood than in the case of unimmunised children, although there is good reason to believe that immunisation in infancy alone does give some measure of protection against a severe attack possibly throughout life.

ESTIMATED NUMBER OF MID-1946 CHILD POPULATION WHO HAD BEEN IMMUNISED AGAINST DIPHTHERIA
UP TO 31ST DECEMBER, 1946.

Boroughs and Urban Districts.	0–5 years.		5–15 years.	
	Total Number Protected.	Percentage of Population at Risk.	Total Number Protected.	Percentage of Population at Risk.
Acton (<i>Borough</i>)	2,981	61·59	4,780	70·50
Brentford and Chiswick (<i>Borough</i>)	4,015	93·81	4,920	80·00
Ealing (<i>Borough</i>)	8,262	59·70	16,950	75·10
Edmonton (<i>Borough</i>)	3,925	48·70	8,944	60·80
Enfield	4,361	49·00	10,671	71·00
Feltham	1,468	40·89	5,632	77·90
Finchley (<i>Borough</i>)	2,646	55·47	4,977	65·40
Friern Barnet	1,386	70·00	1,272	40·00
Harrow	8,818	54·70	18,000	61·10
Hayes and Harlington	2,660	46·50	6,132	60·00
Hendon (<i>Borough</i>)	6,534	60·00	15,088	82·00
Heston and Isleworth (<i>Borough</i>)	3,575	48·91	10,361	73·90
Hornsey (<i>Borough</i>)	5,664	80·00	8,145	90·00
Potters Bar	795	65·16	2,002	94·88
Ruislip-Northwood	2,144	39·20	4,834	56·80
Southall (<i>Borough</i>)	2,172	54·71	4,428	59·20
Southgate (<i>Borough</i>)	2,498	51·29	4,792	67·30
Staines	1,208	40·00	4,600	82·00
Sunbury	1,362	74·02	2,605	79·91
Tottenham (<i>Borough</i>)	4,862	50·80	10,083	64·10
Twickenham (<i>Borough</i>)	5,236	67·30	9,571	74·60
Uxbridge	1,819	46·40	6,316	85·70
Wembley (<i>Borough</i>)	5,995	61·30	8,755	57·60
Willesden (<i>Borough</i>)	10,022	72·00	13,253	65·00
Wood Green (<i>Borough</i>)	2,256	60·00	4,641	80·99
Yiewsley and West Drayton	577	38·21	1,815	63·68
The County	97,241	57·88	193,567	69·48

As before, the County Council's assistant medical officers continued to assist medical officers of health by conducting immunisation sessions in schools and clinics.

OTHER INFECTIOUS DISEASES.—There are no material changes to record as compared with 1945. No cases of smallpox, cholera, plague, typhus, relapsing fever or anthrax occurred.

PUBLIC VACCINATION.

The results of the operation of the Vaccination Acts in Middlesex may be summarised as follows :—

—	1941.	1942.	1943.	1944.	1945.
Births registered	21,523*	28,238*	29,417*	28,733*	27,349*
Infants successfully vaccinated	8,537	13,105	13,786	13,522	13,280
Infants insusceptible to vaccination	126	182	150	101	80
Infants who had had smallpox	1	—	—	—	1
Statutory declarations of conscientious objection	6,328	7,775	8,033	6,706	6,453
Infants died unvaccinated	842	1,029	1,014	920	852
Vaccination postponed by medical certificates	310	259	361	332	255
Removals to other districts	2,321	2,636	2,761	3,614	3,727
Removals to places unknown, &c.	1,806	1,587	1,588	1,487	1,259
Otherwise unaccounted for	1,252	1,665	1,724	2,051	1,442

* This figure does not include re-registered births or cases of children born in other districts.

Of 27,349 infants whose births were registered in Middlesex during 1945, 852 died unvaccinated. Of the remainder, 13,280 (48·3 per cent.) were successfully vaccinated, or were certified to be insusceptible to vaccination. Statutory declarations of conscientious objection were made in respect of 6,453 (23·5 per cent.), whilst 6,683 infants were not vaccinated for various other reasons (postponement on medical certificate, removal, &c.).

TUBERCULOSIS.

The year has shown a steady widening in the strength and scope of the County tuberculosis service. More medical officers, more ancillary staff, improved equipment, additional facilities at clinics for the reception of patients for investigation and after-care, have resulted in an increased turnover of work at the chest clinics. The figures in the tables at the end of this section of the report show the volume of work achieved by this service, and it must be remembered that for every case of proved tuberculosis added to a clinic register at least five non-tuberculous cases have been seen, investigated, and reassured or directed for appropriate treatment.

Not all the cases of tuberculosis that arise during the year attend the County's chest clinics. Of 3,464 new cases (3,019 of which were pulmonary) notified during the year to Medical Officers of Health in the County, 2,683 were diagnosed or confirmed after attendance at chest clinics.

It is worth while examining closely the age distribution of the pulmonary cases. Of the 3,019 cases newly diagnosed during the year, 70 per cent. were aged 20-55 years, that is during the years of responsible family and working life. Of the twelve thousand cases still attending chest clinics in Middlesex in 1946 known to have pulmonary tuberculosis 79 per cent. were in the age group of 20-55 years. The death-rate from tuberculosis per 1,000 total population was the lowest ever recorded.

Of the 894 deaths from pulmonary tuberculosis in the County during the year 69 per cent. occurred in men and women aged 20-55 years. In the age group 15-45 years pulmonary tuberculosis was the highest of all single causes of death and more died from tuberculosis in this age group than at all other ages combined. In this age group, tuberculosis (all forms) killed as many as died altogether from cancer (all forms), heart disease, pneumonia, appendicitis and influenza. Nine per 1,000 of the Middlesex population in the age group 20-55 years, and this group comprises half the total County population, were attending chest clinics on account of pulmonary tuberculosis. Of every thousand in the civilian age group 20-40 years living in the County during the year, 15 were attending chest clinics for the same condition and this is less than the number who must have had the disease. Tuberculosis of the lung strikes this age group more frequently than any other.

The confidence of private medical practitioners in the skill of chest clinic physicians and the increasing co-operation between them has resulted in more suspects being referred by private doctors to clinics for X-ray and special investigation and this, together with the activity of the Mass X-Ray Unit, has ensured better ascertainment of tuberculosis.

Sanatorium and hospital nursing staff difficulties have reduced the number of beds available for treatment. Throughout the year the number of persons awaiting admission to hospital has stood at about 700 and the period of waiting for non-emergency cases has at times been seven months. Considerable use was made by the tuberculosis officers of the beds under their charge in County General Hospitals where pneumothorax, pneumoperitoneum, phrenic crush, adhesion section and similar minor surgical procedures have been done as a prelude to treatment in bed in the patients' own homes under close supervision, thereby considerably shortening and at times entirely eliminating subsequent stay in sanatorium. But patients' home conditions have only in a minority of cases been really fitted for such a course. Domestic overcrowding is very prevalent with the concurrent risks of spread of infection and this is reflected in a five-fold increase in the incidence of tuberculosis in the family contacts of lung cases as compared with the incidence in the general population.

Better housing conditions and more hospital beds especially for advanced infective cases are crucially urgent needs. Home nursing of cases by local voluntary nursing agencies has been used to the full. Domestic helps have been provided by the County Council to meet the household needs where a mother has been bedfast at home or has been admitted to hospital. Apart from making life more tolerable for the families of patients, the provision of these domestic helps considerably reduces the mental anxiety of a mother-patient and is a valuable factor in helping towards her recovery.

Children of women about to enter sanatoria and susceptible young children of dangerously infective home cases have been found homes at the Council's expense with foster parents usually chosen by the patient. 216 children were dealt with in this way during 1946.

Patients' depression has been reduced by maintaining handicraft classes with skilled instructors at all the chest clinics and plans have been made to extend this service to patients in bed in their own homes. The nucleus of a rehabilitation woodwork shop was started towards the end of the year in the large attic of the Edmonton Chest Clinic and here twelve men have enjoyed diversional exercise and instruction. If this experiment proves successful it should be the beginning of a serious attempt to train and employ the ambulant chronic case in suitable industry under sheltered working conditions and careful medical supervision.

The work of the Welfare Officers at chest clinics has progressed. Ascertaining patients' financial, family and domestic difficulties and advising and helping them with these and with industrial problems has been a full-time and worthwhile task.

During the year the chest clinic Welfare Officers investigated 5,660 fresh cases. Government maintenance allowances were recommended for 1,319 and 1,565 were given money grants for extra nourishment. Clothing was provided for 802 persons and bed and bedding for 505.

A car service by arrangement with the County branch of the British Red Cross Society and at the Council's expense was used to transport patients unfit to walk between their homes and the clinics.

Seventeen garden shelters have been provided by the Council for patients' use in their own gardens to alleviate unsuitable housing conditions and these were in continuous use during the year.

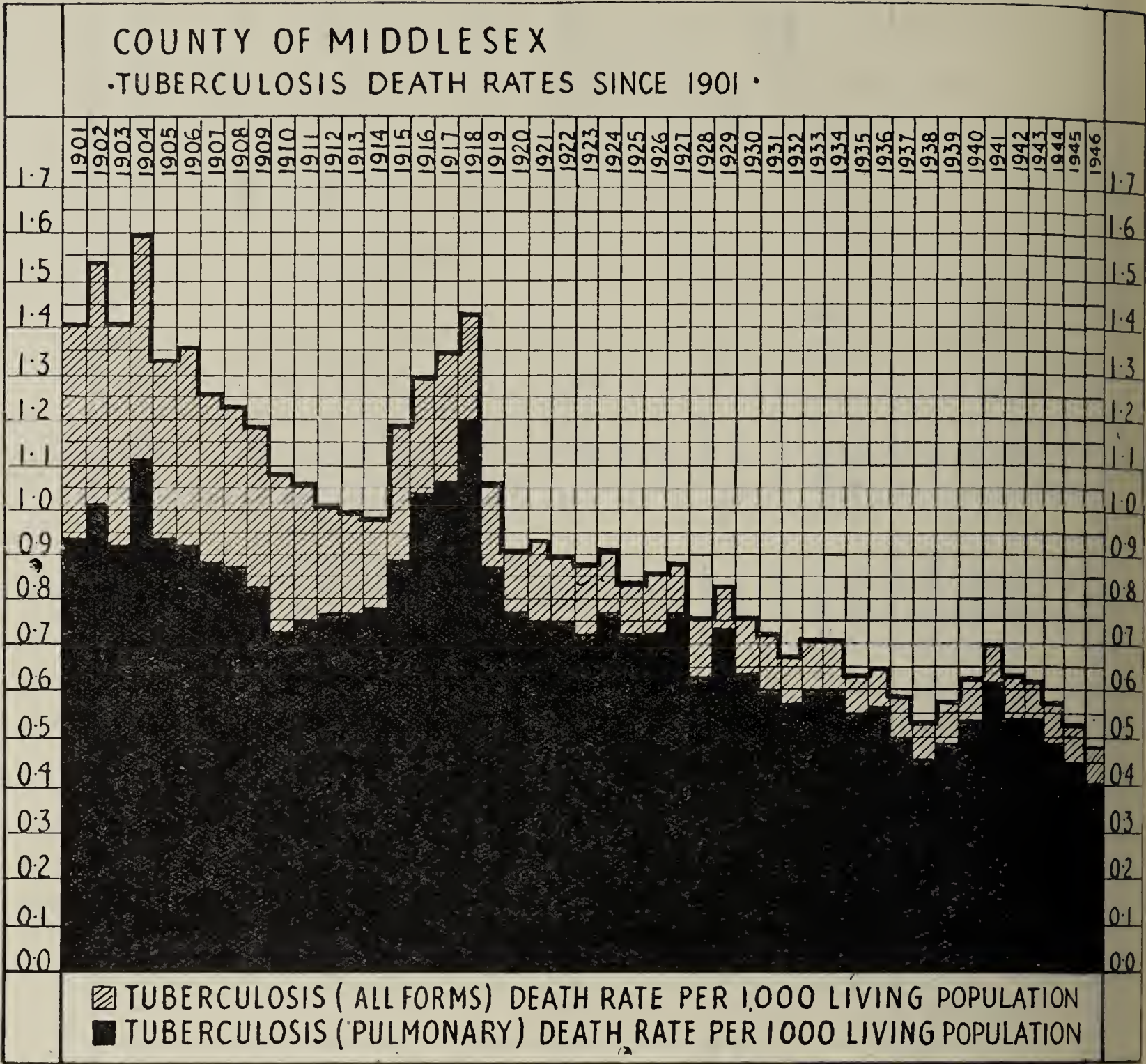
CHEST CLINICS.

Area No.	Clinic.	District Served.	Tuberculosis Medical Officers.	Clinic Address.
1	Edmonton... ..	Edmonton, Enfield ...	Dr. V. Feldman ...	279, Fore Street, Ed- monton.
2	Finchley	Finchley, Friern Barnet, Hornsey, Southgate	Dr. B. Butterworth	655, High Road, North Finchley.
2A	Clare Hall San. ...	Potters Bar	Dr. F. A. H. Simmonds	Clare Hall County Hos- pital.
3	Willesden	Wembley, Willesden ...	Dr. C. H. C. Toussaint	Pound Lane, Willesden.
4	Ealing	Acton, Ealing	Dr. Mary Tate (act- ing)	Green Man Passage, Ux- bridge Road, West Ealing.
5	Hounslow	Brentford and Chis- wick, Feltham, Hes- ton amd Isleworth, Staines, Sunbury, Twickenham	Dr. R. Heller	28, Bell Road, Houns- slow.
6	Uxbridge	Hayes and Harlington, Ruislip, Northwood, Southall, Uxbridge, Yiewsley and West Drayton	Dr. J. T. N. Roe ...	Local County Offices, 259, High Street, Ux- bridge.
7	Tottenham	Tottenham, Wood Green	Vacant	140, West Green Road, Tottenham.
8	Redhill	Hendon	Dr. N. Macdonald ...	Redhill Hospital Chest Clinic, Edgware.
9	Harrow	Harrow (from 21.10.46)	Dr. J. H. Trenchard	53, Greenhill Crescent, Harrow.

TABLE I.
Chest Clinic Records (as reported to the Ministry of Health, December, 1946).

Clinic : Approx. Population in Area served, 1946 :	Edmonton, 208,330.		Finchley, 277,990.		Willesden, 300,400.		Ealing, 243,230.		Hounslow, 360,410.		Uxbridge, 247,430.		Tottenham, 175,510.		Redhill, 153,820.		Harrow, 210,890.		The County, 2,178,010		Grand Total.
	Pulm.	Non- pulm.	Pulm.	Non- pulm.	Pulm.	Non- pulm.	Pulm.	Non- pulm.	Pulm.	Non- pulm.	Pulm.	Non- pulm.	Pulm.	Non- pulm.	Pulm.	Non- pulm.	Pulm.	Non- pulm.	Pulm.	Non- pulm.	
Number of tuberculous cases on clinic register at end of 1945 ...	914	158	1,315	196	1,260	154	1,420	222	1,854	311	1,288	221	819	119	2,123	286	*	10,993	1,667		12,660
Number of new cases diagnosed during the year ...	195	27	248	23	312	25	348	38	425	42	245	50	234	24	357	46	4	2,404	279		2,683
Number of cases written off during the year as :—																					
(a) Recovered ...	53	17	38	13	9	11	13	3	118	43	20	13	26	19	71	39	5	353	158		511
(b) Died ...	85	1	84	1	96	5	99	4	139	6	76	6	77	1	124	9	23	803	35		838
(c) Lost sight of or refused to attend, &c. ...	24	4	41	9	64	11	20	5	96	36	17	4	39	6	70	18	5	376	93		469
Number of tuberculous cases on the clinic register at the end of 1946 ...	921	161	1,417	200	1,416	153	1,618	251	1,899	270	1,404	251	903	114	1,421	181	788	11,787	1,672		13,459

* Harrow Chest Clinic was not an independent unit until October, 1946.



1946 Registrar General's figures for Middlesex.

Deaths—pulmonary ... 894 = rate of 0.41 per 1,000 population.

Deaths—non-pulmonary ... 145 = rate of 0.07 per 1,000 population.

Case-mortality rate ... = rate of 59.31 per 1,000 known cases of tuberculosis (all forms).

1946 Registrar General's figures for England and Wales.

Pulmonary tuberculosis death rate per 1,000 population = rate of 0.464.

Non-pulmonary death rate per 1,000 population = rate of 0.083.

TABLE III.

New Cases of, and Deaths from, Tuberculosis notified to Medical Officers of Health during 1946, divided into Age Groups.

Age Periods in Years.	New Cases.				Deaths.			
	Pulmonary.		Non-pulmonary.		Pulmonary.		Non-pulmonary.	
	M.	F.	M.	F.	M.	F.	M.	F.
0-1	5	3	5	3	1	2	3	3
1-5	48	31	24	20	2	1	15	8
5-10	47	35	35	32	—	2	4	5
10-15	41	56	25	23	2	3	5	11
15-20	149	175	18	25	15	29	7	8
20-25	274	296	17	36	54	48	3	21
25-35	421	399	29	57	91	91	7	6
35-45	279	194	17	28	105	64	5	10
45-55	198	88	9	14	127	41	4	3
55-65	141	32	5	8	102	25	5	1
Over 65	67	40	2	13	58	31	2	9
All ages	1,670	1,349	186	259	557	337	60	85

NOTE.—The numbers of cases notified by medical practitioners to District Medical Officers of Health are always higher than those attending chest clinics.

TABLE IV.

TUBERCULOSIS IN THE CONSTITUENT DISTRICTS, 1946.

Boroughs and Urban Districts.	Popu- lation Mid-1946.	1946 Notifications to Medical Officer of Health.			1946 Deaths (Registrar-General).				“Poverty.” Persons on Out-Relief. Average Weekly Figure, 1946.	All Tuber- culosis Cases on Medical Officer of Health Registers.	Deaths from Tuber- culosis All Forms (Registrar General).	Death- rate per 1,000 on Register.	Registered Tuber- culous Cases per 1,000 population.	
		Pulmonary.		Non-pulmonary.	Pulmonary.		Non-pulmonary.							
		No.	Rate per 1,000 living.	No.	Rate per 1,000 living.	No.	Rate per 1,000 living.							
Acton (<i>Borough</i>)	65,150	95	1.46	13	0.20	35	0.54	4	0.06	251	879	39	44.37	13.5
Brentford and Chiswick (<i>Borough</i>)	57,220	104	1.82	8	0.14	29	0.51	7	0.12	318	1,107	36	32.52	19.3
Ealing (<i>Borough</i>)	178,080	205	1.15	28	0.16	78	0.44	15	0.08	669	1,374	93	67.69	7.7
Edmonton (<i>Borough</i>)	104,120	158	1.52	29	0.28	39	0.37	8	0.08	600	792	47	59.34	7.6
Enfield ...	104,210	93	0.89	14	0.13	48	0.46	2	0.02	635	743	50	67.29	7.1
Feltham ...	38,740	52	1.34	9	0.23	18	0.46	4	0.10	186	278	22	79.14	7.2
Finchley (<i>Borough</i>)	68,670	70	1.02	10	0.15	23	0.33	3	0.04	206	653	26	39.82	9.5
Friern Barnet ...	28,210	25	0.89	1	0.04	10	0.35	1	0.04	120	192	11	57.29	6.8
Harrow ...	210,890	253	1.20	26	0.12	79	0.37	11	0.05	521	1,401	90	64.24	6.6
Hayes and Harlington ...	64,650	86	1.33	10	0.15	25	0.39	2	0.03	364	445	27	60.67	6.9
Hendon (<i>Borough</i>)	153,820	144	0.94	25	0.16	63	0.41	12	0.08	415	1,059	75	70.82	6.9
Heston and Isleworth (<i>Borough</i>)	104,240	166	1.59	13	0.12	46	0.44	10	0.10	385	851	56	65.80	8.2
Hornsey (<i>Borough</i>)	93,050	114	1.23	13	0.14	38	0.41	4	0.04	410	1,254	42	33.49	13.5
Potters Bar ...	15,350	13	0.85	2	0.13	2	0.13	1	0.07	25	122	3	24.59	7.9
Ruislip-Northwood ...	62,070	42	0.68	4	0.06	15	0.24	3	0.05	144	300	18	60.00	4.8
Southall (<i>Borough</i>)	54,440	76	1.40	12	0.22	24	0.44	3	0.06	240	565	27	47.79	10.4
Southgate (<i>Borough</i>)	72,710	64	0.88	8	0.11	25	0.34	4	0.06	141	441	29	65.76	6.1
Staines ...	36,360	42	1.16	5	0.14	13	0.36	2	0.06	200	182	15	82.42	5.0
Sunbury ...	21,000	27	1.29	2	0.10	10	0.48	1	0.05	80	95	11	115.79	4.5
Tottenham (<i>Borough</i>)	124,830	197	1.58	24	0.19	75	0.60	10	0.08	1,034	865	85	98.27	6.9
Twickenham (<i>Borough</i>)	102,850	127	1.23	19	0.18	33	0.32	6	0.06	433	877	39	44.47	8.5
Uxbridge ...	48,520	72	1.48	22	0.45	18	0.37	4	0.08	186	343	22	64.14	7.1
Wembley (<i>Borough</i>)	129,850	106	0.82	14	0.11	43	0.33	8	0.06	200	801	51	63.67	6.2
Willesden (<i>Borough</i>)	170,550	241	1.41	24	0.14	81	0.47	15	0.09	1,026	1,247	96	76.98	7.3
Wood Green (<i>Borough</i>)	50,680	81	1.60	8	0.16	22	0.43	3	0.06	245	520	25	48.08	10.3
Yiewsley and West Drayton ...	17,750	15	0.85	7	0.39	2	0.11	2	0.11	99	133	4	30.08	7.5
The County	2,178,010	2,668	1.22	350	0.16	894	0.41	145	0.07	—	17,519	1,039	59.31	8.0

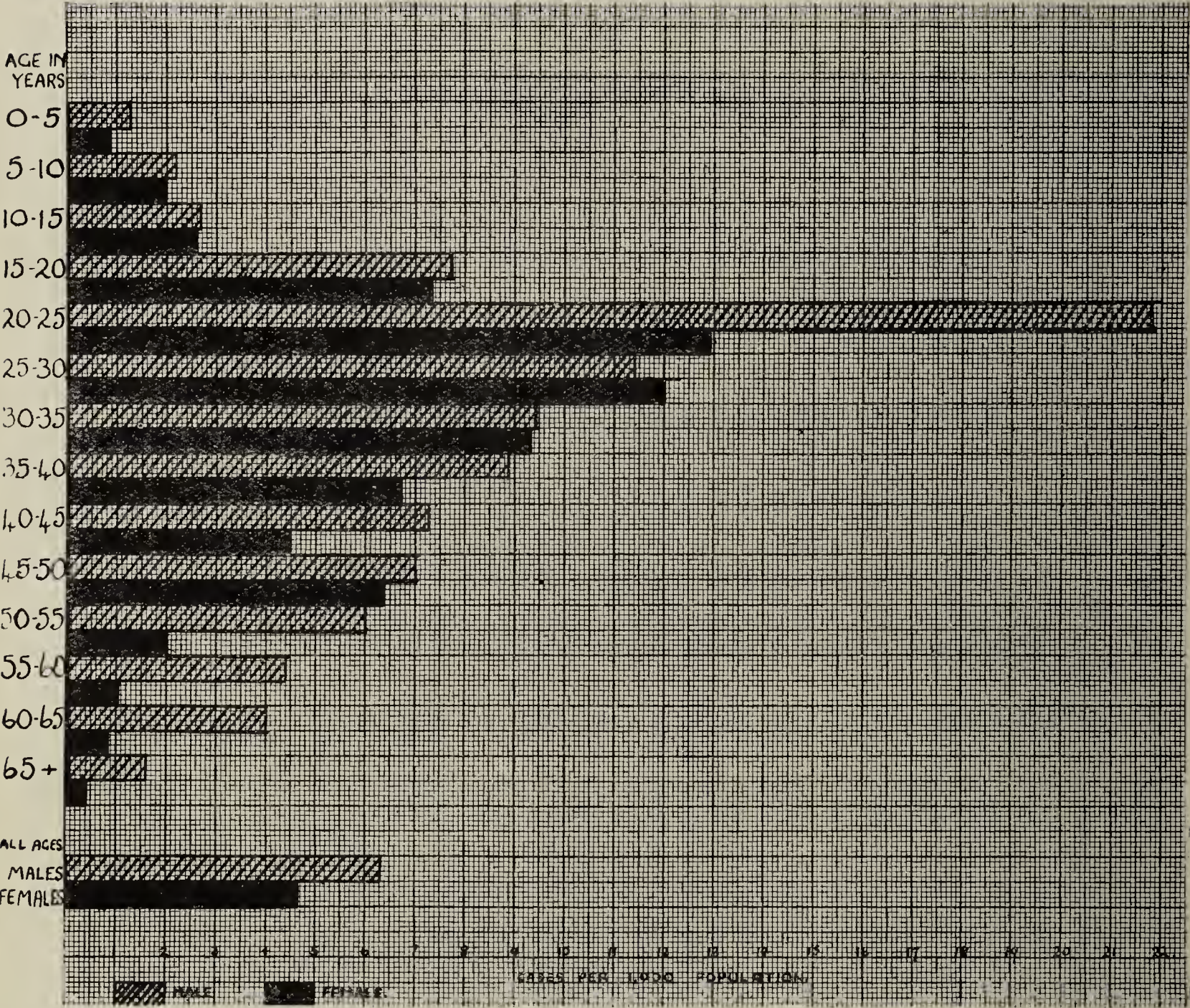
Tuberculosis.

Age.	Clinic :	Edmonton.		Finchley.		Willesden.		Ealing.		Hounslow.		Uxbridge.		Tottenham.		Harrow.		Redhill.		All Middlesex.		Total Civil Population, December, 1946.
		Pulm.	Non-pulm.	Pulm.	Non-pulm.	Pulm.	Non-pulm.	Pulm.	Non-pulm.	Pulm.	Non-pulm.	Pulm.	Non-pulm.	Pulm.	Non-pulm.	Pulm.	Non-pulm.	Pulm.	Non-pulm.	Pulm.	Non-pulm.	
0-5	Male	6	1	12	2	25	6	8	5	17	5	10	7	14	4	16	4	5	—	113	34	93,767
	Female	5	4	9	3	11	5	7	2	9	2	9	10	8	8	12	8	5	—	75	36	89,206
5-10	Male	14	15	19	12	15	14	21	10	31	20	25	26	19	9	10	6	15	7	169	117	77,387
	Female	10	7	18	9	17	5	15	13	36	12	21	22	7	6	11	6	12	10	147	92	74,758
10-15	Male	10	13	30	23	15	11	18	19	34	16	37	21	15	6	18	6	27	11	204	135	75,612
	Female	10	12	20	12	8	6	32	14	51	13	31	21	8	5	20	5	14	8	194	94	73,522
15-20	Male	35	9	33	5	97	11	51	17	66	6	34	6	37	4	74	4	60	7	487	88	63,118
	Female	57	10	32	3	133	8	67	13	78	12	43	16	24	7	87	6	50	13	571	88	77,656
20-25	Male	71	7	123	9	145	6	120	14	165	15	97	8	86	6	89	6	103	8	999	81	45,704
	Female	92	13	113	6	147	12	123	19	192	15	111	12	84	5	92	3	111	15	1,065	104	82,397
25-30	Male	76	10	120	9	135	7	105	8	149	17	96	12	67	7	51	3	102	8	901	81	78,802
	Female	80	9	136	11	113	8	146	17	172	15	112	11	84	7	68	7	132	11	1,043	96	86,397
30-35	Male	50	6	95	10	116	10	119	9	113	11	92	12	72	5	57	5	94	7	808	77	85,903
	Female	66	7	114	16	95	5	134	21	143	16	86	20	67	4	54	10	88	14	847	113	90,982
35-40	Male	56	4	97	11	86	5	118	12	120	8	98	8	77	3	58	3	87	9	797	66	90,060
	Female	45	4	86	10	43	12	100	16	111	21	99	3	50	4	30	1	75	11	639	82	94,217
40-45	Male	67	6	64	6	67	3	82	4	88	12	79	7	51	2	44	2	93	5	635	48	87,049
	Female	23	3	43	9	25	4	72	12	65	12	63	9	34	4	22	4	59	6	406	63	90,756
45-50	Male	55	—	58	2	50	1	76	2	80	5	73	4	32	1	42	1	60	3	526	19	75,297
	Female	19	4	38	1	20	5	37	4	35	8	41	5	26	2	10	1	33	3	259	33	83,588
50-55	Male	37	1	50	7	34	2	49	6	56	1	56	1	23	1	19	1	61	2	385	22	64,129
	Female	7	6	16	3	16	1	18	2	20	4	25	5	20	5	6	3	23	5	151	34	77,229
55-60	Male	23	5	39	3	38	1	30	2	34	1	30	2	20	—	14	—	31	3	259	18	59,119
	Female	6	1	3	4	5	—	15	3	14	5	10	2	15	2	2	1	4	3	74	21	70,870
60-65	Male	17	—	30	—	19	1	32	1	31	—	16	—	29	1	11	—	16	—	201	4	50,670
	Female	4	—	8	5	6	—	4	2	6	2	6	—	10	—	3	—	4	2	51	12	63,747
Over 65	Male	18	1	33	2	7	1	26	2	26	2	21	—	12	—	8	—	13	1	164	10	103,316
	Female	3	—	11	6	—	1	14	4	4	2	9	—	4	3	3	3	4	2	52	19	141,742
All Ages—	Male	535	78	803	101	849	79	855	111	1,010	132	764	114	554	69	511	45	767	71	6,648	800	1,049,933
	Female	427	80	647	98	639	72	784	142	936	139	666	136	441	55	420	62	614	103	5,574	887	1,197,067

TABLE VI

HISTOGRAM TO SHOW THE INCIDENCE (CLINIC CASES) OF PULMONARY TUBERCULOSIS PER 1,000 CIVILIANS EACH SEX IN EACH AGE GROUP.

1946



NOTE—THE INFLUENCE OF NATIONAL SERVICE (ARMED FORCES) ACT DEPLETING MALES AGE 20-25 YRS. AND SO EXAGGERATING TUBERCULOSIS INCIDENCE IN THIS GROUP.

TABLE VII.

Work of the Chest Clinics during 1946.

	Area 1. Edmonton.	Area 2. Finchley.	Area 3. Willesden.	Area 4. Ealing.	Area 5. Hounslow.	Area 6. Uxbridge.	Area 7. Tottenham.	Area 8. Redhill and Harrow.	Totals.
(1) Total number of persons seen for first time during the year	1,303	1,531	2,270	2,717	3,114	2,367	1,833	2,929	18,064
(2) Number of (1) found to be tuberculous... ..	222	271	337	386	467	295	258	447	2,683
(3) Contacts of known cases examined	512	637	571	891	949	870	816	1,176	6,422
(4) Number of those in (3) found to be tuberculous... ..	36	8	16	14	29	12	13	10	138
(5) Total consultations during year-- (a) at clinic	4,475	6,786	10,634	13,803	10,277	11,537	7,227	12,313	77,052
(b) at home	90	110	277	76	144	1,825	105	265	2,892
(6) Number of A.P. and P.P. refills performed at clinic†	118 from 25.7.46	—	3,884	4,116	10,240	4,314	750	9,646	33,068
(7) Number of X-ray films taken at clinic	1,160 from 25.7.46	*	6,361	7,200 estimated	11,240	7,340	2,100	*	35,401
(8) Total home visits by Tuberculosis Visitors	3,511	4,632	1,433	2,450	5,667	4,558	4,602	4,668	31,521

N.B.—Harrow started as a main chest clinic on 21.10.46.

* X-Ray work for these clinics in 1946 was done at other institutions.

† Artificial pneumothorax refills and pneumoperitoneum refills.

TABLE VIII.
Tuberculosis Welfare Officers' Work, 1946.

Clinic Areas :	1.	2.	3.	4.	5.	6.	7.	8.	9.	Total.
1. Cases investigated ...	236	562	941	650	1,371	402	644	479	375	5,660
2. Patients recommended Government allowances	131	124	169	202	220	99	101	194	79	1,319
3. Patients and dependants given extra nourish- ment	161	110	175	305	148	256	156	143	111	1,565
4. Patients and dependants given clothing ...	78	81	86	99	95	119	91	105	48	802
5. Patients and dependants given bedding ...	47	61	62	48	93	45	57	58	34	505
6. Patients given Home Help services	44	97	80	98	127	52	55	29	45	627
7. Children boarded-out ...	9	41	40	27	22	33	21	10	13	216

Note.—The figures in this table refer only to persons for whom the services indicated were provided during 1946 for the first time.

INSTITUTIONAL TREATMENT.

The main bulk of the lung cases were admitted for long stay active treatment to the two well-staffed and well-equipped sanatoria at Clare Hall (317 beds) and at Harefield (320 beds). From these, convalescent patients were transferred to the subsidiary institutions respectively at Danesbury (50 beds) and Grims Dyke (45 beds). Special beds at County General Hospitals varying in number from 20–60 at each were set aside for operative short stay, or for chronic tuberculosis cases, under the immediate care of one of the chest clinic physicians. Use, whenever possible, was also made of institutional accommodation in private and other non-County hospitals, sanatoria and colonies.

Tuberculous Patients admitted to Institutions during 1946.

	Pulmonary Cases.	Non-pulmonary Cases.	Beds Available.
To County General Hospitals—			
Ashford	201	—	56
Central	271	54	59
Chase Farm	85	—	34
Hillingdon	49	30	—
North Middlesex	74	—	23
West Middlesex	348	86	64
Redhill	169	29	48
To Sanatoria—			
Clare Hall	598	—	317
Harefield	593	—	320
Sanatorium Convalescent Homes—			
Grims Dyke	(122)*	—	45
Danesbury	(262)*	—	50
Total admitted to County Institutions ...	2,388	199	1,016
To Non-County Institutions	351	182	As available
All patients “ hospitalised ”	2,739	381	—

* Transfers from Clare Hall and Harefield.

I am indebted to the Medical Directors of Clare Hall and Harefield Sanatoria for the following notes on the year’s work at those hospitals.

CLARE HALL COUNTY HOSPITAL AND DANESBURY CONVALESCENT HOME.

(Dr. F. A. H. Simmonds, Medical Director.)

The average number of beds available for " sanatorium " patients was 367 (389). (Figures in brackets refer to 1945 in each case.) Despite the reduced number of beds the increased number of 617 patients were discharged (598). The average length of stay was reduced to 223 days (255 days). The total number of patients discharged " sputum negative " was 386 (438). 74 per cent. of patients had some form of collapse therapy.

There has been a continued pressure on all departments, for example, in the Pathology department the number of laryngeal swab cultures made has increased from 2,943 to 4,871. Early in the year fluorescent microscopy was adopted for routine slide examination for tubercle bacilli ; this is somewhat more expeditious and causes less eye strain in the worker, but the time saved has been more than absorbed in other increases of work.

The medical staff has increased by another physician (Dr. Maxwell Telling, M.D., M.R.C.P.) and staffing has been arranged on the same plan as in County Hospitals.

Following are some particulars of other work undertaken in addition to the routine work of the sanatorium :—

Parts of two wards are given up to County Hospital patients, of whom 114 were admitted during the year ; this makes heavy demand on nursing.

Patients are admitted for a few days from County Hospitals for adhesion section while still on the waiting list for Clare Hall.

Alternatively the surgeon has visited at County Hospitals to undertake this work, and has also made many visits to Chest Clinics in consultation. Medical staff visit Shenley and Napsbury Hospital in consultation concerning the tuberculous units in each hospital, and the surgical staff have undertaken all emergency surgery at Shenley.

The Chest Clinic for Potters Bar area is held in the hospital and is very freely consulted.

In the case of sick staff and health examinations of a routine character, including the examination of new candidates, some 1,400 attendances were made, and in addition 775 X-rays of the chest were taken for members of the staff.

In addition to the training of Student Nurses on the staff of Clare Hall, a change-over each three months of a small group of nurses from North Middlesex County Hospital sent here for training has been accomplished.

Middlesex County Patients.

(1) Patients admitted, discharged or died.*

	In Hospital 31st Dec., 1945.	Admitted.	Discharged.	Died.	In Hospital 31st Dec., 1946.
Males	135	217	206 + 1*	2	143
Females	193	347	340 + 2*	12	186
Children—					
For treatment	27	38 + 3*	53	—	15
,, observation	2	2	4	—	—
Totals	357	604	603	14	344

*Note.—This table includes one male and two female children transferred from adult to children's ward.
Also 25 patients not classified on discharge, and 9 patients not suffering from tuberculosis.
234 patients were transferred to Danesbury.

Average number of beds available	367
Average number of occupied beds	364
Average length of stay of patients discharged	222·7 days
Average length of stay of patients dead	170·07 days
Average proportion of bed patients (i.e., in bed for two meals or more) (average for year)	94 per cent.

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(2) *The number of patients admitted from Dispensary Areas during the year are shown below :—*

Area 1	...	...	...	...	...	...	...	...	89
„ 2	...	...	...	...	...	...	...	...	116
„ 2 CH		...	...	...	...	...	...	...	17
„ 3	...	...	...	...	...	...	...	...	64
„ 4	...	...	...	...	...	...	...	...	66
„ 5	...	...	...	...	...	...	...	...	88
„ 6	...	...	...	...	...	...	...	...	2
„ 7	...	...	...	...	...	...	...	...	66
„ 8	...	...	...	...	...	...	...	...	65
„ 9	...	...	...	...	...	...	...	...	31
									604

(3) *The total number of Patients Discharged during the year was 603 : of these—*

(a) Diagnosis of tuberculosis confirmed (adults)	...	...	...	...	516
(b) „ „ (children)	...	...	...	...	53
(c) „ not confirmed (adults)	...	...	...	...	7
(d) „ „ (children)	...	...	...	...	2
(e) Not classified on discharge	...	...	...	...	25
					603

Sixty “Tuberculous Discharged Soldiers” (men and women), *i.e.* persons receiving a pension for tuberculosis attributed to War Service, were treated during the year.

Forty-eight “Awaiting Service Discharge” patients were treated during 1946.

North Middlesex County Hospital Patients.

					In Hospital 31st Dec., 1945.	Admitted.	Discharged.	Died.	In Hospital 31st Dec., 1946.
Male	...	...	...	...	28	59	49	13	25
Female	...	...	...	...	28	55	50	5	28
Totals					56	114	99	18	53

Note.—17 male and 28 female patients were transferred to the sanatorium side of the hospital during the year.

11 female patients were transferred to Danesbury Manor and 2 male patients to Grims Dyke.

The Tables Nos. 4-9 below refer to Tuberculous Patients only.
(4) *Age Grouping.*

	Males.	Females.	Total.
0-9 years	25	13	38
10-14 „	3	11	14
15-24 „	76	144	220
25-34 „	66	126	192
35-44 „	47	54	101
45-54 „	8	7	15
55 years and over	3	0	3
Totals	228	355	583

(5) *Duration of Stay.*

	Discharged.			Died.			Total.
	M.	F.	C.	M.	F.	C.	
One month or less	6	4	5	0	2	0	17
One to three months	22	63	4	1	1	0	91
Three to six months	65	100	15	0	4	0	184
Six to twelve months	58	111	17	1	3	0	190
Over twelve months	47	40	12	0	2	0	101
	198	318	53	2	12	0	583
Total (M., F. and C.)	569			14			= 583

(6) *Dental Treatment.*

No. of Treatments completed.	No. of Patients Inspected first time.	Total Extractions.	(a) Under Gas or General Anæsthetic.	(b) Under Local Anæsthetic.	Fillings.	Other Treatment.	No. of Dentures Completed.
1,111	320	240	45	195	124	540	54

(7) *X-ray Department.*

The number of X-ray films taken were as follows :—

Chest	7,980
Other (general)	340
Barium examinations	9

(8) *Pathological Department.*

Blood examinations	2,216
E.S.R.	5,514
Cytological examinations	729
Bacteriological examinations	1,963
T.B. cultures	6,066
T.B. microscopical	6,201
Biochemistry	415

The number of units of penicillin dispensed has increased almost tenfold, due mainly to greatly increased dosage.

Although the successful development of fluorescent microscopy for routine examinations has made speedier, and at least as accurate, examinations possible, the time saved has been absorbed by the increase in T.B. culture work, media making, and blood examinations.

(9) *Physiotherapy Department.*

The work carried out in this department included Massage, Electro-therapeutics, Ultra-violet light and Swedish remedial exercises.

Number of patients treated	...	...	...	...	...	...	3,879
Attendances	...	...	...	...	...	...	8,726
Treatments	...	...	...	...	...	...	10,160

(10) *Transfer of Nurses.*

During the year 8 nurses were transferred to M.C.C. General Hospitals for completion of their training.

Fifty nurses were transferred from the North Middlesex County Hospital to Clare Hall for three months' tuberculosis nursing experience. (Plus 12 for two weeks' holiday relief only.)

HAREFIELD COUNTY HOSPITAL.

(Dr. K. R. Stokes, Medical Director.)

1. *Summary of the changes that occurred in the working of Harefield during 1946.*

During the year the General Medical and Surgical Work which had been carried out in the E.M.S. Wards in the previous seven years came to an end.

The following table gives a brief summary of that work :—

Total number of cases treated	...	...	...	...	...	14,561
Civilian sick	...	...	...	...	...	12,367
Military war casualties	...	...	...	...	...	1,719
Civilian air raid casualties	...	...	...	...	...	475

The wards released by the cessation of this work were allocated to the establishment of a unit for the treatment of military patients suffering from tuberculosis. The staff of this new unit, apart from medical officers, was provided by Queen Alexandra's Imperial Military Nursing Service and the Royal Army Medical Corps. The Q.A.I.M.N.S. Staff were housed in the Nurses' Home and the R.A.M.C. Staff on three wards.

Both the treatment of cases on the Middlesex County Council's tuberculosis wards and on the E.M.S. thoracic surgical unit continued without interruption during the year.

The changes which occurred are exemplified in the following table :—

	E.M.S. General Wards.	E.M.S. Thoracic Surgical Unit.	M.C.C. Tuberculosis Wards.	Military Unit for T.B. Patients.	Total Beds.
Bed state on—					
1st January, 1946 ...	301	104	320	Nil	725
31st December, 1946 ...	36*	104	320	72	532

* These 36 beds are reserved for the treatment of Chronic Sick.

2. *Summary of any difficulties or improvements that transpired.*

As a result of the cessation of general medical and surgical work the hospital ceased to be recognised as a complete training school for nurses and reverted to its former status as an affiliated training school.

As was anticipated, this alteration adversely affected the number of student nurses and state registered nurses recruited for work on the M.C.C. tuberculosis wards.

The number of nurses and staff fell from 264 in December, 1945, to 159 in December, 1946.

3. Some notes on thoracic surgical and other special forms of treatment undertaken during the year.

(a) Thoracic surgical work at the hospital.

Thoracoplasty (stages)	111
Adhesion section... ..	152
Threnic crush	276
Bronchoscopy	291
Oesophagoscopy	13
Pneumonectomy	24
Lobectomy	36
Pericardectomy	8
Ligature of patent ductus	10
Oesophagectomy... ..	7
Repair of diaphragmatic hernia	3
Drainage of sub-phrenic abscess	3
Empyema drainage	5

(b) Summary of special forms of treatment carried out on tuberculous patients discharged from M.C.C. tuberculosis wards during the year.

Artificial pneumothorax	190
Adhesion section... ..	143
Phrenic crush	116
Pneumoperitoneum	127
Monaldi drainage	12
Thoracoplasty	32

Four hundred and seventy tuberculous patients (407 adults, 63 children) were discharged during the year.

Of the 407 adults, 289 were treated by one or other or a combination of the above procedures, i.e., 71 per cent. of all adult patients discharged received some form of collapse therapy.

MASS X-RAY.

The following report on the work of the Mass X-ray Unit in 1946 has been submitted by Dr. Pinton Dick, the physician in charge of the unit :—

During 1946, 44,048 persons were examined. In 1944 the number was 34,227 and in 1945, 49,349. The diminution in numbers this year compared with 1945 is accounted for by the more frequent moves which the Unit has had to make owing to the smaller size of the groups examined. Most of the larger factories in the County had been visited during the previous two years. In 1946, the Unit visited the North of the County for the first time. The average number of examinees per site was 5,944 in 1945, but had dropped to 3,280 in 1946. On the other hand the number of outside groups which visited the Unit had risen from 255 in 1945 to 328 in the following year.

While the demand for the services of the Unit is still great, the volunteer response at individual factories has fallen. This I think can in large measure be accounted for by fear of unemployment should lesions be discovered.

Excluding the largest single factory which had already been thoroughly examined in 1945, there were 42,061 persons examined during the year and of these 528 (1·2 per cent.) had significant lesions and 91 (0·2 per cent.) required treatment. Of the observation cases some 55 can be expected to show signs of activity and thus come into the treatment group. Of the 91 cases requiring treatment 21 were living outside the County, but in addition an unknown number of cases living within the County were found by other Units. The findings at the individual centres and the age-groups of the significant lesions are given in the Tables on pages 40 and 41.

In addition a number of non-tuberculous conditions were found. These included neoplasms, pulmonary and lymphatic, congenital heart lesions, bronchiectasis, Albers-Schonberg disease and hæmosiderosis.

The apparatus gave a minimum of trouble during the year. It was found that a surface overhaul every three months was necessary to maintain it in first-class condition. This was carried out at the centre at which it was situated at the time.

Two innovations of considerable importance were introduced in 1946: the holding of public sessions and the examination of secondary school leavers.

The offer of the services of the Unit to the general public at public sessions is the only means at present available to cover unorganised groups such as housewives and workers in small shops. They comprise a very large proportion of the population of the County, and include relatives of the factory workers already being examined. It is logical to examine not only the factory worker and his environment (his fellow workers) at the factory but also his environment (or relatives) at home.

During 1946, 6,864 persons were examined at public sessions held at seven factories and a church hall: 90 (1·3 per cent.) significant, i.e., tuberculosis lesions were found and of these 26 (0·4 per cent.)

required treatment. This compares with 1·2 per cent. of significant lesions among all examinees in 1946, 0·2 per cent. of which required treatment. These figures suggest that the examination of the general public volunteers by Mass Radiography is likely to be as productive of cases as the examination of factory workers, and I feel that the two methods are complementary.

At the public sessions held at one factory a questionnaire was presented to all persons attending in an attempt to assess the most effective method of publicising the Unit's visit. The results are given in Table on page 41. From this it would appear that posters, the film and the local newspapers are most productive of results and that the distribution of leaflets at the cinema can be discontinued.

The second major innovation, the examination of school leavers, of which there are some 5,000 in the County annually, should give us valuable information regarding this group and, by stimulating interest in the method, encourage a visit to any Unit that may be surveying their subsequent place of work. The numbers examined are as yet too small for any conclusions to be drawn, but some very interesting post-primary lesions have been found. All school leavers who are fluorographed also have a tuberculin jelly test and it is hoped to be able to re-examine these children at yearly intervals both for radiographic changes and for tubercular sensitivity. In this way the conversion rate will be found following the entry into industry of this age group and the time interval between tuberculin conversion and the development of post-primary disease noted.

As the result of finding an unusually large number of significant lesions (2·8 per cent.) among the volunteers (51 per cent. of the total employees) from a small electrical engineering factory which visited the Unit, the firm was approached and arrangements made for the examination of the remainder of its employees. It was found that the premises consisted of several houses in a poor class district which had been connected together by the demolition of interior walls. It was arranged for the Unit to visit the factory using the mobile generator as its source of current. Some further 200 persons volunteered to be fluorographed as the result of this visit, but only three further significant lesions were found, none of which required treatment. The final results were that out of 531 volunteers (giving a 84 per cent. response) 13 had significant lesions (2·5 per cent.) only one of which required treatment (0·2 per cent.). As it was impossible to get further volunteers, the results were more suggestive than significant. The firm's medical officer was most co-operative and was asked to let us know of any further cases that came to his notice.

In conclusion I feel that our experience in 1946 and the preceding years has established that Mass Radiography is an effective and sometimes the only means of discovering incipient chest disease, be it infective, neoplastic or congenital, of limiting the spread of pulmonary tuberculosis by uncovering infector cases and of enabling treatment to be initiated at an early stage of the disease, so diminishing the period of institutional treatment necessary to return the patient to normal life.

MASS X-RAY UNIT, TABLE I.
Analysis of Significant Lesions, 1946.

Factory.	Number examined.	Known cases T.B. healed.	Known cases T.B. relapsed.	Needing observation.	Per cent.	Treatment required.	Per cent.	Significant lesions.	Per cent.
1 ...	4,413	11	1	66	1·5	15	0·3	81	1·8
2 ...	4,952	10	0	39	0·8	8	0·2	47	0·9
3 ...	1,048	18	0	7	0·7	2	0·2	9	0·9
4 ...	5,970	12	0	63	1·1	9	0·2	72	1·2
5 ...	3,443	6	1	41	1·2	12	0·3	53	1·5
6 ...	4,851	4	1	66	1·4	8	0·2	74	1·5
7 ...	209	0	0	2	1·0	0	—	2	1·0
8 ...	1,802	2	3	12	0·7	5	0·3	17	0·9
9 ...	2,340	8	0	17	0·7	5	0·2	22	0·9
10 ...	2,615	8	0	28	1·1	10	0·4	38	1·5
11 ...	7,789	4	0	70	0·9	15	0·2	85	1·1
12 ...	2,639	2	1	26	1·0	2	0·1	28	1·1
Totals ...	42,071	85	7	437	1·0	91*	0·2	528	1·3
Single factory 3rd survey	1,987	25	1	8	0·4	2	0·1	10	0·5
Grand Total...	44,058								

* 21 were living outside the County.

MASS X-RAY UNIT, TABLE II.
Age Groups of " Significant Lesion " Cases.

	0-14.		15-24.		25-34.		35-44.		45 and over.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Total examined	513	588	3,951	6,400	6,431	4,349	7,578	3,408	6,752	2,091
Requiring treatment	0	0	6	24	19	13	7	5	15	2
Rate per 1,000	—	—	1·5	3·8	3·0	3·0	0·9	1·5	2·2	1·0
Requiring observation	1	2	25	63	64	49	84	37	98	14
Rate per 1,000	2·0	3·4	6·3	9·8	10·0	11·3	11·1	10·9	14·5	6·7

These figures do not include the factory which had its third annual survey during the year.

MASS X-RAY UNIT, TABLE III.
Public Session Questionnaire.

Members of general public who attended were made aware of Mass X-ray facilities by :—

1. Friends, relations, or workmates	413
2. Posters	242
3. Film at cinema	146
4. Local newspaper	113
5. District nurse (23 nurses were notified of scheme)	41
6. Doctors (112 doctors were notified of scheme)	23
7. Leaflets at cinema	18
8. Any other way	49
	<hr/> 1,045 <hr/>

Venereal Diseases.

Diagnosis and Treatment.—The centres available to Middlesex patients for the diagnosis and treatment of venereal disease during 1946 were the four clinics established by the County Council at Central Middlesex, Hillingdon, West Middlesex and Ashford County Hospitals, the clinic financially maintained by the County Council at the Prince of Wales Hospital, Tottenham, within the County and elsewhere the clinics associated with those hospitals participating in the London and Home Counties joint scheme for the treatment of venereal disease. The clinic at Ashford County Hospital was opened on 1st August, 1946.

Below is a comparative statement of the work done at clinics in Middlesex and London hospitals during the past five years, while the table on page 44 gives details of the work of the individual clinics in Middlesex during the years 1942–1946 inclusive.

	Middlesex Patients treated at									
	Hospitals in Middlesex.					Hospitals in London.				
	1942	1943	1944	1945	1946	1942	1943	1944	1945	1946
Number of persons dealt with at the clinics for the first time and found to be suffering from :—										
Syphilis	285	325	242	265	414	224	214	160	191	291
Soft chacre	5	1	1	—	1	6	6	2	2	2
Gonorrhœa	261	262	296	368	400	523	348	287	393	716
Conditions other than venereal	726	1,542	1,241	1,455	1,994	1,367	2,186	1,854	2,244	2,865
Totals	1,277	2,130	1,780	2,088	2,809	2,120	2,754	2,303	2,830	3,874
Total attendances ...	26,959	33,893	27,536	31,006	43,425	43,761	44,160	36,489	35,150	38,255
Number of “in-patient” days of treatment ...	*135	*44	*384	616	534	1,882	1,137	960	920	901

* Prince of Wales Hospital, Tottenham, only. Figures shown for this hospital include only residents of the County, the costs being borne by the Middlesex County Council under the agreement with the hospital.

From an examination of the figures given in the above table a marked increase in the number of patients dealt with at the clinics is apparent, both at the hospitals in Middlesex and London. The combined total for the year amounted to 6,683 cases, or nearly 36 per cent. higher than the aggregate for the previous year. Of these, 4,859 cases were found to be due to conditions other than venereal, as compared with 3,699 similar cases in 1945, an increase of 1,160.

For every category of case these are the highest figures yet recorded and cannot fail to arouse a very definite feeling of disquiet. Doubtless they are associated to a considerable degree with a sense of relief from the tension of the war years and a consequential, though it may be hoped temporary, lowering of the moral standards to which we clung during the time of sustained effort. It may well be also that this relaxation of moral standards has been materially influenced by a popular impression which undoubtedly exists, that the application of the sulphonamide group of drugs and penicillin to the treatment of venereal diseases has now made their cure a matter of certainty, rapidity and comfort. When the qualifications to any such general assumption become more generally realised, as a result of effective health education, it may be hoped that a regression in the figures of incidence of venereal disease will become evident.

Social service.—The arrangements for the follow up of contacts named under Defence Regulation 33B were continued in 1946. During the year notifications relating to 76 contacts were received, of which 70 were first notifications; the remaining six concerned persons already responsible for the infection of one or more patients. In the case of first notifications 58 were traced, while 4 were found to have moved to other areas; only two of those interviewed failed to attend a clinic for examination.

Notifications were less than half those received in the previous year and the greater number were received during the first quarter. The main source of information has always been medical officers of the services and particularly allied forces. Demobilisation and the fact that the United Kingdom was no longer the only leave centre had an obvious influence on the number of notifications received.

The single notifications referred more often to persons in regular employment than previously, and for this reason it was not easy to interview them, and sometimes several visits were needed. Of those contacts named more than once all had been known in earlier years.

The two special services almoners were able to consolidate the work in the clinics and to visit the patients who failed to attend clinics when required. Penicillin treatment has enabled the co-operative patient to complete treatment and remain under supervision with the minimum of personal inconvenience. Others, however, in spite of careful explanation cannot see the point of attendance when treatment is over. For these home visits seem the most effective way of encouraging a return for supervision. It is difficult to be sufficiently explicit and discreet for letters to be effective.

650 visits on clinic patients and contacts were made during the year.

Venereal Disease Propaganda and Sex Education.

The County Council makes an annual contribution to the funds of the Central Council for Health Education, on the basis of five shillings per thousand of the population, in consideration of that Council's work in the education of the public regarding the dangers of venereal diseases and in the dissemination of information concerning sexual hygiene. One-sixth of the total contribution is credited to the County Council against the cost of providing talks and lectures and the supply of literature.

The work carried out in Middlesex during 1946 by the Central Council for Health Education consisted mainly of courses of lectures on sex education to young people and talks to parents of school children and to various women's groups, while health films were shown to the staff of certain large industrial firms.

	Central Middlesex County Hospital.*					Hillingdon County Hospital.†					West Middlesex County Hospital.‡					Prince of Wales General Hospital, Tottenham.					Ashford County Hospital.§
	1942	1943	1944	1945	1946	1942	1943	1944	1945	1946	1942	1943	1944	1945	1946	1942	1943	1944	1945	1946	
Number of persons dealt with at the clinics for the first time and found to be suffering from :—																					
Syphilis ...	83	132	118	135	166	48	29	40	47	62	74	79	52	53	128	95	100	82	75	181	17
Soft chacre ...	2	—	1	—	1	—	—	—	—	—	1	—	—	—	—	2	2	—	—	2	—
Gonorrhoea ...	95	110	102	145	143	52	52	72	84	116	35	41	77	86	113	102	83	74	127	235	9
Conditions other than venereal	287	570	496	609	826	124	250	310	305	429	95	346	306	358	516	295	496	488	602	899	29
Totals ...	467	812	717	889	1,136	224	331	422	436	607	205	466	435	497	757	494	681	644	804	1,317	55
Total attendances ...	10,672	14,686	14,967	14,590	16,229	6,628	4,624	4,904	7,413	11,042	2,334	4,909	4,313	6,910	12,163	9,255	11,465	8,194	6,696	12,584	510

* Clinic opened April, 1941. † Clinic opened December, 1941. ‡ Clinic opened May, 1942. § Clinic opened August, 1946.

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